

Den Europæiske Investeringsbank  
Europäische Investitionsbank  
Ευρωπαϊκή Τράπεζα Επενδύσεων  
European Investment Bank  
Banco Europeo de Inversiones  
Banque européenne d'investissement  
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Europese Investeringsbank  
Banco Europeu de Investimento



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# EIB-Information

## Annual Meeting of the Board of Governors

The European Investment Bank's Board of Governors at its annual meeting in Luxembourg on 15 June, 1987 unanimously approved the 1986 annual report and balance sheet. The meeting of the Board, which consists of a Minister, usually the Finance Minister from each of the 12 Member States, was chaired by the Governor for Denmark, Palle Simonsen, Minister of Finance. The annual report was presented to the Governors by the EIB's President Ernst-Günther Bröder in his capacity as Chairman of the Board of Directors.

Key figures on the EIB's activities during the year are given in the address of the EIB President to the Board, reproduced below.

The Board of Governors expressed its full approval of the conduct of the Bank's affairs by the Management Committee and Bank staff. The Governors expressed their satisfaction with the way the EIB had contributed both quantitatively and qualitatively towards the balanced development of the Community as directed by the Treaty of Rome.

During their discussion on the wider ranging implications of the EIB's activities within the context of the European Community's development, the Governors looked forward to the Bank continuing to play a vital role as a source of finance for major European infrastructure projects. The Bank's decision to support the Channel Tunnel was viewed as of historic dimension in terms of its size and financing arrangements. The extent and manner of the EIB's involvement in the Tunnel project could be a pattern for the Bank's participation in other large infrastructure projects in the future.

The Governors also appreciated the flexible manner in which the EIB had been able to respond to new Community requirements, in particular in its support for the objectives of NCI IV by providing 750 million ECUs from its own resources under similar conditions for the same objectives.

The Board believed that the EIB was in a position to make an important contribution in the implementation of the Single European Act to help to bring about greater economic and social cohesion within the Community, and promote the development of the internal market. The Governors agreed that close co-ordination would be required with the Community's structural funds to ensure the most effective use of all resources, and expressed their preference for the use of loan finance for funding projects wherever possible.

The Governors commended the Bank on its prudently innovative approach to financing, that enabled it to remain responsive to the changing needs and priorities of the Community. They confirmed their commitment to maintain the EIB's excellent credit standing on world capital markets which enables it to fulfil its role as the Community's financing institution.

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The address of President Bröder to the Board of Governors follows:

Mr Chairman, Gentlemen,

I should like, if I may, to comment on the main points of the past financial year and then to take up some broad issues of Bank policy.

## In brief...

The Annual Meeting of the Board of Governors, although not conducted amid a glare of publicity, was the occasion for an in-depth exchange of views between the Governors who voiced their satisfaction with the quality and extent of the Bank's contribution in 1986 to the attainment of priority Community objectives (see leading article). As for the bias of future activities, the EIB must continue to attach foremost importance to regional development while paying due heed to other objectives in areas such as advanced technology and protection of the **environment** (see article on p. 4). The Bank's role in contributing towards the financing package of the **Eurotunnel Project** could serve as a model for other major European infrastructure schemes (see p. 2).

A further demonstration of the Bank's versatility and adaptability is its decision to put up an amount (750m ECUs) from its own resources identical to and in tandem with that provided for under the fourth tranche of the **New Community Instrument (NCI IV) for capital investment by SMEs**, bringing the total available for this purpose on the same terms and conditions to 1.5bn ECUs (see article on p. 9). The **European Financial Engineering Company (EFEC)** also exists to help finance SMEs (see p. 11). A further point stressed by the Governors was that, within its own terms of reference, the Bank could make a concrete contribution towards achieving the objectives of the Single European Act.

The economic context within which the EIB operated in 1986 was again one of moderate, albeit somewhat uneven, growth.

The totality of the Bank's lending for investment financing during 1986 amounted to 7.5 billion ECUs. This represents a 5% rise compared to the 7.2 billion extended in 1985. 94% of this total amount was lent from own resources, the rest representing operations under mandate from the Community.

**Operations within the Community** totalled 7.1 billion ECUs, out of which 6.7 billion or 94% was from the Bank's own resources and 0.4 billion from those of the "New Community Instrument". The total figure represents an increase of some 4% over the 6.8 billion lent in 1985.

Lending from own resources increased by 13% whereas lending from NCI resources further declined as the resources available under the then-existing authorisations were progressively used up. Lending from own resources is fully consistent with that envisaged for 1986 at the time of the Bank's last capital increase.

In 1986, for the first time for many years, there were loans in all member countries, though of course at very different levels. Loans for projects in Italy continue to rank foremost (43%), followed by those in the United Kingdom (nearly 20%) and France (9%).

Last year, the Bank lent some 3.7 billion ECUs to finance **regional development**<sup>(1)</sup> in the Community, nearly all of it being from own resources. Although the Bank continued to respond to requests from a wide range of less-favoured areas in the more advanced countries, more than two thirds of the total amount went to projects in countries and regions commanding the highest priority under Community regional policy, namely, Portugal, Greece, Ireland, Northern Ireland, the Italian Mezzogiorno, and certain parts of Spain.

Investment linked to the **energy objectives** of the Community attracted loans totalling 2.6 billion ECUs: development of indigenous resources (1.4 billion), rational use of energy (0.8 billion), import diversification (0.4 billion). In addition, the Bank, acting as agent for Euratom, signed jointly with the Commission fi-

nance contracts for a total amount of 0.6 billion.

Structural adjustment of European **industry** resulted in loans amounting to 1 billion ECUs (0.7 billion from own resources and 0.3 billion from NCI); among these, advanced-technology projects accounted for 0.6 billion, the rest being for industrial cooperation, modernisation and the promotion of small and medium-sized enterprises. These loans are additional to industrial lending made in the context of regional development.

In sum, lending for industry, agriculture and services represented 1.9 billion ECUs, or 27% of total lending within the Community. Global loans continued to be widely made available to promote small and medium-sized ventures, with additional financial intermediary institutions being utilised.

Loans for investment specifically designed for **environmental protection** have doubled compared to the previous year, and attained 0.7 billion ECUs; they mainly concern water purification and the reduction of pollution by power plants and industry.

The improvement of the **Community's transport and telecommunication networks** has been sustained by loans totalling 0.6 billion ECUs for road, railway, harbour, airport and transmission investments.

The total cost of the investment projects financed by the EIB in 1986 is estimated at 23 billion ECUs. This is equivalent to about 1% of gross fixed capital formation at the level of the whole Community. The concentration of EIB lending in some countries, regions and sectors, however, means that its contribution to financing investment is substantial in some areas: in the Mezzogiorno, for example, more than 6% of total investment was financed by the EIB.

Three quarters of all Community lending for investment purposes in 1986 was made by the Bank from its own resources.

**Operations outside the Community**, part of the cooperation policy and undertaken in the framework of the protocols and conventions signed by the Community and Third World countries, amounted to about 380 million ECUs from own resources and 92 million from budgetary resources managed by the Bank on behalf of the Community, giving a total of nearly 0.5 billion.

## EIB to finance Channel Tunnel

The Channel Tunnel linking France and the UK will be financed by the European Investment Bank with up to £ 1 billion/ FF 10 billion (approximately 1.4 billion ECUs). The Bank's Board of Directors has agreed to lend the funds in the light of the EIB's own review of the project's technical, economic, and financial viability. The finance goes to the Eurotunnel group to be phased in a series of loans over the Tunnel's six-year construction period (1988-1993).

The EIB's loans, primarily at fixed interest rates reflecting prevailing market conditions and for terms of up to 25 years, will be made available through co-financing arrangements in association with a syndicate of international banks led by National Westminster, Crédit Lyonnais, Banque Nationale de Paris, Midland Bank and Banque Indosuez. The EIB finance will, under a £ 5 billion credit agreement between the syndicate and Eurotunnel, be secured by guarantees provided by the participating banks until the successful completion of the Tunnel, and then by a charge on project assets and revenues. No government funds or guarantees are

involved. Conclusion of the contractual arrangements will depend on the passage of the necessary legislation, and the successful completion of bank syndication and forthcoming equity issues by Eurotunnel.

Commenting on the Board's decision, which was on the proposal of the Bank's Management Committee, EIB President Ernst-Günther Bröder said: "The EIB is one of the major sources of finance for large and complex infrastructure projects within the Community. The Bank regards the Channel Tunnel as a project of exceptional importance to the development of the Community's transport network. The Tunnel will be a stimulus to the European economy and provide an opportunity for co-operation between European enterprises.

"European integration will be helped by developing more direct cross-Channel transport links and increased co-operation between the British, French and other European railways. At the same time the Tunnel will be a major challenge to the construction and transport industries internationally."

<sup>(1)</sup> Lending figures by objective cannot meaningfully be added together as certain loans correspond simultaneously to more than one objective.

Financing in the Mediterranean countries amounted to 264 million ECUs. Most of the so-called second-generation Mediterranean protocols expired in 1986, the amounts available having been fully used.

The activity in the ACP States was marked by the entry into force of the third Lomé Convention in May last year; about 210 million ECUs were extended, mainly in African countries, and included funds still to be deployed under the second Lomé Convention.

**Funds raised** by the Bank in order to finance lending from own resources amounted to 6.8 billion ECUs against 5.7 billion in 1985. The relative abundance of liquidity and declining interest rates made it possible to boost borrowing activity under favourable conditions. About 0.8 billion was used for refinancing earlier, more costly issues which were redeemed ahead of maturity. Issues denominated in U.S. dollars again accounted for the largest proportion of operations, closely followed by issues denominated in ECUs and the Deutsche Mark. The Bank strongly developed its borrowings in Italian lire which moved into third place among Community currencies. In addition, it continued its prudent policy of diversification, for example in the floating rate markets and swap operations.

At 31 December 1986, the Bank's balance sheet total stood at 40.7 billion, as against 35.1 billion at end-1985.

Overall Bank activity in 1987 has so far aligned with the projections submitted to the Board of Directors last December and again suggests moderate growth in EIB lending.

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Our work during the past year has been marked by a combination of continuity and further innovation. We have continued to pursue the Bank's traditional objectives of regional development and of positive adjustment in the fields of energy and industry. We have also continued to give emphasis to the financing of high technology and environmental protection projects in accordance with the guidelines adopted by you in June 1984. The Bank has however showed flexibility where changing circumstances made it appropriate to do so. I would like to focus for a moment on this latter point.

During negotiations on NCI IV, this Board assumed that, as a flexible instrument in the service of Community policies, the Bank would be in a position to make available 750 million ECUs from its own resources for the same pur-

poses and on the same conditions as NCI IV. This was an extension of the Bank's usual eligibility criteria in that it enabled some kinds of lending to be undertaken outside the assisted areas which previously had been undertaken only inside such areas. Moreover this lending can be extended partly to embrace new spheres. For example, in suitable cases, the Bank might lend to intermediaries who would use the proceeds of these loans as equity investments in small and medium-sized enterprises. In so extending its traditional ways of financing in a smooth and rapid manner, the Bank again demonstrated its willingness to undertake new tasks to accommodate changing needs within the Community.

The stimulus for the new approaches introduced in the context of NCI IV came from the Council of Ministers and this Board of Governors. The Bank itself has also taken a number of initiatives of its own in addition to its usual activity.

Thus from 1st April this year the Bank has taken over the NCI Treasury, thereby achieving more effective cooperation between the Commission and the Bank and avoiding possible associated risks for the Community budget.

In addition, the Eurotunnel project calls for particular mention. The sheer scale of this project, its importance for the Community and the requirement that both financing and corresponding guarantees be provided entirely by the private sector mark this project out as being very special. In the event, the EIB has accepted to lend up to 1.4 billion ECUs for this project in the form of a cofinancing agreement with a syndicate of commercial banks. The loan will be disbursed in tranches over six years, so that annual disbursements do not upset total Bank lending. On the other hand, 1.4 billion ECUs is much more than the Bank has ever lent before for a single project. Moreover, by making this lending decision at a relatively early stage and before construction work started, the Bank has given an obvious signal which will have a positive influence on both the general financing and the launching of this important project. The Bank has also been able to contribute towards easing many of the constraints which financing to completion in the commercial bank market alone might otherwise have encountered. The terms of the loan and the guarantee also incorporate novel features. In sum, this is in many ways an unusual operation — one which shows how the long-term funds provided by the EIB can complement equity and the finance provided by commercial banks in facilitating the real-

isation of a major infrastructure project of European interest. It constitutes a possible model for large infrastructure projects in the future.

Looking ahead, a major consideration for the Bank and for the Community as a whole will be the passing of the Single Act which seeks to promote closer cohesion within the Community in a number of fields and the development of the internal market. The Bank has an important contribution to make to both of these policy objectives, alongside its other roles; and progress towards these two objectives will in turn change the environment in which the Bank operates. We are discussing with the Board of Directors the implications of this Act for the Bank's activities. In addition, we have already forged close contacts with the Commission on this matter.

The Bank will have certain adjustments to make. However, given the support of this Board and the institution's flexibility, I am confident that the Bank will be well able to cope.

An important issue in the context of the Single Act is that of joint financing with the structural funds, particularly the Regional Fund. When promoters of regional investment projects are given a straightforward choice between EIB loans and Community grants, as can happen at present, they naturally choose grants even though in some cases loan finance would have been appropriate. This adds unnecessarily to the strains on the Community budget and it fails to make best use of scarce resources. We, like the Commission, would prefer that, when Community finance is offered, there is a preference for Community loans and not for Community grants where appropriate. This would make scarce budgetary funds go further and boost the volume of investment which benefits from Community finance.

I should like to offer a few comments on our future activity outside the Community. Now that Lomé III is well launched, we are looking forward to the third round of Mediterranean protocols. There is still a great deal of work to be done in preparing this new round if we are to ensure that the Community's financial contribution brings the greatest possible benefit to the economic development of the Mediterranean countries. In undertaking this work, we have again benefited from the good and close cooperation with the Commission.

Mr Chairman, I hope that the developments I have described confirm that the

Bank has continued to make its contribution both qualitatively and quantitatively to the building of the Community. This has been possible with a modest increase of staff of only 0.7% in 1986. The Management Committee is determined to keep the Bank a compact institution in order to preserve and build on the advantages of flexibility and efficiency. For 1987, despite the projected growth in activity and the diversity and complexity of operations, a staff increase of only 1% is budgeted. Hence, our personnel policy now accords priority to measures designed to increase efficiency. Several Directorates have been restructured and greater emphasis has been given to internal mobility, in both cases to improve the use of staff resources. I am also glad to say that the integration of Spanish and Portuguese staff is well on target, and this without

adding to staff numbers, partly through natural wastage, partly through early retirement and partly concentrating recruitment of new staff on these two new countries.

A number of changes in personnel policies have been initiated to increase staff motivation and productivity. As part of these, the structure of our remuneration system is being revised with a view to making it more performance-oriented and I hope to report to the Board of Directors on our conclusions before the end of the year. As our staff — the Bank's main asset — must remain responsive to new challenges, we must not only develop a competitive remuneration policy in order to attract qualified staff but also continuously motivate them and retain them in Bank service. This is not easy, given the

developments in the banking sector, and the Management Committee is grateful that the Board of Directors approved a general salary increase in May which will now make possible the introduction of appropriate measures.

To keep the efficiency of our operations under permanent review, we are extending the functions of our Internal Auditors. Together with the external Auditors, they prepare the data and analyses which constitute the basis for the work of the Audit Committee appointed by this Board. We are impressed by and appreciate the way in which the Committee is adjusting its role to the growing scope and complexity of the Bank's activities. These different complementary mechanisms enable us to underscore the adequacy of our own control and discharge procedures.

## Environmental protection in the air

**This article intends to give an idea of the EIB's approach to conservation of natural resources and environmental protection. On the one hand, it describes the evolution of the Bank's policy in this field and the role played by the EIB's governing bodies: the Management Committee, the Board of Directors and the Board of Governors. On the other hand, the article shows how this policy is put into practice. Environmental protection is an integral part of the project appraisals carried out by the EIB's staff. The environmental impact assessment is assigned to the Bank's technical advisers. They have the practical knowledge and expertise and, because of this, for this special occasion, they themselves are given the floor to explain how, on a project level, the Bank's policy becomes practice.**

The European Year of the Environment (EYE) began on the first day of spring of this year. Special activities and a broad information campaign are to mark the EYE, which will last until the first day of spring in 1988. Not just another European Year, but one in which important practical objectives are to be realised. All Community citizens are to be made aware of the importance of environmental protection. On the policy making level of the Community and its Member States, the EYE seeks to promote the further integration of environmental protection, particularly in economic, industrial, agricultural and social policies.

### The EIB approach

To improve and safeguard the environment has always been a concern of the European Investment Bank and it wholeheartedly endorses the objectives of the European Year of the Environment. Says EIB President Ernst-Günther Bröder, "The Bank's Management Committee absolutely agrees with the EYE

objectives. Although the EIB is not a political body and has no legislative powers, it has a contribution to make as a project financing bank. Its support for the conservation of resources and environmental protection is witnessed by the projects receiving EIB finance and the way in which a decision to finance is reached. Detailed appraisals, carried out by the Bank's staff, help to select the investment projects which will receive EIB support. The environmental impact of the proposed investment plays an important, at times decisive, role in the decision making process."

Project appraisal is carried out by interdisciplinary expert groups of the Bank's staff. The division of labour follows the EIB's internal organisation into Directorates, each of which has its own specific responsibilities. Financial analysts from the Directorates for Lending Operations assess the project's overall viability and the borrower's standing. Economists from the Research Directorate evaluate the economic justification of financing the project under review,

whereas the technical viability as well as the environmental aspects of the proposed investment are assessed by the Bank's Technical Advisory Service. The Management Committee is regularly informed of the way the appraisal is progressing and it decides if and when the project will be recommended for financing to the Board of Directors which authorises lending operations.

At the EIB, the environmental impact is an essential component in the appraisal of all projects for which finance is considered. Instead of opting for a separate unit to assess pollution control and other environmental problems related to projects, environmental protection is fully integrated in the appraisal procedure. Thus, the environment receives the constant and systematic attention it deserves.

Says Hellmuth Bergmann, who, as the Bank's Chief Technical Adviser, co-ordinates environmental questions: "The span of the fields of the Bank's operations is too large to let the environmental aspects be handled by generalists. The thirty-five technical advisers are all specialists in their respective areas, ranging from the chemical industry to electronics, energy production to aviation, and from transport infrastructure to agriculture. Knowing their areas, they are the first to identify potential problems and, basing themselves on experience gathered by looking at similar projects elsewhere, to offer alternative, least polluting solutions."

Indeed, most projects have environmental implications which need to be dealt with. Only in a few sectors – for example in telecommunications – investments appear to be environmentally neutral.

The environmental impact assessment by the Bank's staff consists of an analysis on the basis of a standardised checklist which takes into account the effects on water, air and soil, noise levels and visual pollution (see box on environmental parameters). This checklist is complemented by more specialised and detailed lists and sectoral guidelines, also used by other concerned international institutions such as the Commission of the European Communities, the World Bank, and the United Nations Environmental Programme.

Depending on the nature of the project, the June 1985 Council Directive (85/337/EEC) on environmental impact assessment for certain public and private projects will serve as reference for the engineers' appraisal. The Directive lays down that, before consent is given, projects likely to have significant effects on the environment, because of their nature, size or location, are made subject to an environmental impact assessment. Very similar to the EIB engineers' own checklist, such an assessment has to take in the direct and indirect effects on human beings, fauna and flora, soil, water, air, climate and the landscape, the interaction between the factors mentioned as well as the effects on material assets and the cultural heritage. The Directive covers, inter alia, large infrastructure works, crude-oil refineries and the like, integrated chemical installations, iron and steel works, waste-disposal installations as well as power stations and other large combustion installations.

Additional sources of information on which the EIB's engineers often base themselves are feasibility studies prepared by consultant firms at the borrower's request. Sometimes, for certain industrial investments for example, insurance reports are available as a reference.

Once all the relevant data have been collected, the appraisal team will meet again with the project promoter to discuss the outcome. At all times, the Bank guarantees that the existing environmental legislation – whether national, Community, or international – has been met before it decides to finance. In case improvements are necessary or desirable, the Bank will offer advice on which of the various options for reducing environmental pollution are most suitable

for the project concerned and which show the optimum cost/benefit ratio. The ultimate aim is to convince the borrower to adopt the least polluting solution for his investment plans, inter alia by drawing attention to ongoing Community deliberations which are likely to affect the project in the years to come.

Evaluating the environmental consequences of the projects proposed for

financing have long been part of EIB appraisal procedures. The first projects which were entirely oriented towards the environment were financed in the early seventies. In 1973, for example, steelworks in North Rhineland-Westphalia installed equipment for the control of exhaust fumes and dust emission with EIB support; a year later, the construction of a combined treatment plant for industrial effluents emanating from BASF's Ludwigshafen works as well as

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## Basic environmental considerations in project appraisal

What aspects of the environment will be altered by the project? Of these changes, which will improve and which degrade the environment?

What irreversible changes may be caused? (disappearance of animal or vegetable species; impairment of the particular characteristics in the area, etc.)

What measures can be adopted to lessen the deleterious environmental effects or to enhance any beneficial ones?

## Project planning options: environmental parameters to be checked

### Quality of water:

Dissolved oxygen. Biological oxygen demand. Total organic carbon. Biomass. Phosphates. Nitrates. Salinity. Specific toxins. Temperature. pH. Suspended solids. Bacteria. Viruses. Parasites. Turbidity. Colour/smell. Surface appearance (debris, oily film).

### Quantity of water:

Flow rate. Seasonal variations. Flooding.

### Quality of soil:

Soil erosion. Sedimentation. Beach protection. Elimination of solid waste. Derelict sites not reinstated following construction. Acidification. Leaching. Alkalisiation. Fertility.

### Quality of air:

Oxides of sulphur. Oxides of nitrogen. Other volatile substances (hydrocarbons, fluorides). Carbon monoxide. Solid and fine particles.

### Aquatic ecosystems:

Breeding. Migration. Preservation of the natural and genetic heritage, especially of rare and endangered species and systems.

### Terrestrial ecosystems:

Breeding. Migration. Preservation of the natural and genetic heritage, including rare and endangered species and systems. Introduction of new, appropriate systems. Crop rotation.

### Undesirable and/or irreversible change:

Salinity. Poisoning. Eutrophication.

### Vulnerability to natural hazards:

Earthquakes. Tidal waves. Typhoons. Hurricanes. Geological faults (dams etc.)

### Aesthetic aspects:

Disappearance of rare and prized landscape. Historical, cultural and archaeological sites.

### Microclimate:

Incidence of frost, icing, fog. Temperature variations. Increased humidity.

### Auditory nuisances:

Worksites. Industry. Power stations. Traffic.

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sewage from the towns of Ludwigshafen and Frankenthal attracted an EIB loan.

In 1983, the EIB's steadfast interest in environmental protection led to the signing of the Declaration of Environmental Policies and Procedures Relating to Economic Development and the Bank becoming a Member of the Committee of International Development Institutions on the Environment (see box pg. 7).

The EIB's governing bodies wanted to go further. In 1983, a working group of the EIB's Board of Directors examined how the Bank's contribution to environmental protection could be maximised. A series of recommendations, widening the scope for EIB support of environmental protection, was formulated by the working group and unanimously endorsed by the Board of Governors in 1984 (see box below).

### Principles and practice

Principles and good intentions are necessary, but how do they work out in practice? Given their day-to-day involvement in assessing the environmental consequences of the projects the

Bank considers for finance, some of the engineers directly concerned are quoted pointing out the essentials of the EIB approach for projects in industry, the energy sector, and in transport and water infrastructure.

In those cases where the investment project is inspired by other than environmental considerations, the first concern is to see to it that negative effects of the planned investment are kept to a minimum. Other projects, however, are entirely environment-oriented and receive EIB support precisely because they improve the environment: for example, the retrofitting of thermal power plants to reduce air pollution and water projects improving the treatment of sewage or of waste water.

### Industry

Investments in industry are technically assessed by Filippo Barilli and his team. Between 1982 and 1986, the Bank lent over 6.1 billion ECUs for investment projects in chemicals, pharmaceuticals, plastics, rubber, pulp and paper, glass, cement, and the like. Most of these industries are not primarily known for their positive environmental impact.

Says Barilli: "The chemical industry especially has an image problem. Often it is associated with noxious pollution, even though chemical engineering and the chemical industry have provided most of the solutions for fighting environmental pollution."

The EIB's environmental impact assessment is carried out on the basis of the standardised checklist and additional analyses, tailored to the nature of the project concerned. But, even the most detailed appraisal cannot guarantee that accidents won't happen. Says Barilli: "Particularly in industry, to minimise the chances of a calamity, we need to look at the management's attitude towards environmental matters. There appear to be three distinct categories. The minimalist approach is to refrain from any measures which are not dictated by law. A corrective attitude is one step up: the management is willing and ready to take steps to remedy serious environmental damage even if is not yet legally required to do so. The third possible approach is, what I call, the optimal approach: a positive, responsible attitude towards environmental matters, which, fortunately, we often encounter. Most of the industrial investment projects we have financed in recent years involved the introduction of advanced automation systems which, generally, have helped to improve working conditions and reduce environmental pollution as much as they have helped to increase production and cost effectiveness."

A certain company philosophy on environmental protection usually entails a structuring of the organisation which demonstrates that approach. How environmental problems are dealt with depends on the characteristics of the industry concerned. There may be a specialised department but there are also companies where the responsibility for the sound environmental functioning of the plant is everybody's concern and all staff members, similar to a quality circle approach, are conscious of its importance.

### Energy

With loans totalling close to 10 billion ECUs from 1982 to 1986, projects in the energy sector represent an important part of the Bank's activities. Most of the lending has gone to energy production. Gunter Westermann, one of the technical advisers appraising energy projects at the European Investment Bank: "Power generation, from an environ-

## Governors' recommendations

At its meeting on 4 June 1984, the EIB's Board of Governors<sup>(1)</sup>, acting on a proposal from the Board of Directors<sup>(2)</sup>, endorsed the following recommendations:

- extension of the eligibility criteria to projects outside assisted areas helping substantially to protect the environment;
- additional<sup>(3)</sup> finance of up to 10% of total costs for projects incorporating anti-pollution equipment offering greater protection than that required under existing standards;
- strict application of national, international and Community regulations;
- in the absence of binding regulations:
  - encouraging investors to adopt the least polluting design and, in all events, to provide for subsequent incorporation of adequate waste treatment facilities;
  - consideration of the overall impact on the environment when assessing the economic viability of a project, particularly in the case of cross-border pollution;
- outside the Community, the Bank should refrain from financing projects which seriously transgress international standards, allowance being made for the specific ecological problems of developing countries;
- the Bank should continue to join forces with other financing institutions, particularly within the framework of the Committee of International Development Institutions on the Environment (CIDIE).

(1) The Board of Governors is made up of one Minister from each Member State, usually the Minister of Finance.

(2) The Board of Directors consists of 22 members and 12 alternates; on the basis of recommendations by the Management Committee it decides on loans and guarantees, borrowings and interest rates.

(3) Normally EIB loans do not exceed 50% of total investment costs.



mental point of view, is a highly sensitive area. Without the necessary technical provisions, conventional thermal power plants fuelled by oil or coal, will seriously affect the quality of air. And, but this also goes for nuclear power plants, they need enormous quantities of cooling water. Apart from such major consequences, there may be noise and, especially in the case of energy transmission projects involving poles and towers, a considerable visual impact. There simply are no major investment projects without environmental consequences."

The engineers' first interest is in establishing the state-of-the-art technology the project promoter can apply in his power production or distribution scheme. As far as the environmental aspects are concerned, the baseline is that the technical lay-out meet the legal requirements with regard to emission control, work safety, et cetera. The next step is to see, together with the project promoter, whether improvements can be made beyond the legal requirements. Says Westermann: "We have a good record. Often we have been able to re-orient the project promoter, and have him install the necessary apparatus such as modern fly-ash filters and flue gas desulphurisation equipment."

The increasing awareness and sensitivity about environmental matters among project promoters in the energy sector is making the Bank's point of view more widely accepted. The estimated economic life-span of the conventional power plants which are constructed in Europe today is some twenty years. Therefore, to look at what additional investments may be necessary to abide with future environmental legislation between the date of commissioning and the end of the project life-cycle is desirable. After all, the progress made in legislation over the last ten, twelve years has made a lasting impression and promoters have an interest in avoiding their plant having need retrofitting in the near future.

The case for environmental legislation has recently been made in Germany. Following the entry into force of legislation laying down strict anti-pollution standards for emission control, project promoters have been approaching the EIB for loans towards capital investment aimed at building new plants and converting a number of fossil fuel-fired power stations to comply with the new norms. Since early 1986, the operators of four power stations have taken up loans: two existing stations for investments in highly efficient flue gas desulphurisation equipment, fly ash filters

and various measures to reduce nitrogen oxide emissions and two newly-built plants for the introduction of innovative, clean boiler techniques such as fluidised bed combustion.

The new German legislation is centred on large-scale combustion installations. In practice, the initial emphasis is on thermal power stations which are required to meet the new standards before the end of 1988, failing which they must phase out production and close down by 1993. The investments will make for considerable improvements in terms of bringing cleaner air to highly populated areas. Emissions will actually be scaled down to levels below those called for by law.

The use of renewable energy resources and waste heat contribute to a better environment. Hydroelectric and geothermal schemes in the Community received EIB support totalling some 1.2 billion ECUs between 1982 and 1986. These schemes are not only non-polluting by themselves, but they also reduce the use of the potentially polluting fossil fuels. The same is true for the district heating systems which the Bank has

financed. A number of these burn household waste as a source of heat: the use of conventional fuel types is reduced and the possible medium-to-long-term negative environmental effects of waste disposal are avoided. When excess heat from industrial sources or from power stations is used in district heating systems, they also substitute for fossil fuels.<sup>(1)</sup>

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### Transport infrastructure

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Transport infrastructure projects account for an important portion of the EIB's lending. From 1982 to 1986, close to 4 billion ECUs were taken up to finance roads, railways, ports and air transport. Compared with the complex environmental consequences of industrial and energy investments, the impact of transport infrastructure is relatively clear-cut and the counter-measures which it may be necessary to implement are well-defined.

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(1) For an overview of EIB activities in the field of rational use of energy, see EIB-Information No. 46 of October 1985.

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### Some recent history

On 26 April 1983, Mr Pierre Werner, who was at the time Luxembourg Prime Minister and President of the EIB's Board of Governors, Yves Le Portz, then President of the Bank's Management Committee, Mr Mostafa Tolba, Executive Director of the United Nations Environmental Programme, and high-ranking representatives from the main international financing bodies, such as the World Bank and the United Nations Development Programme, met in the Bank's Luxembourg headquarters. The occasion: on that day the EIB became a signatory to the Declaration of Environmental Policies and Procedures Relating to Economic Development. The signing of this Declaration, as Mr Le Portz emphasised, was "more than just a ceremony. It (was) a formal expression of (the Bank's) commitment to work for economic growth within a framework of respect for the environment."

The financial institutions which have signed the Declaration of Environmental Policies and Procedures become, at the same time, Members of the CIDIE, the Committee of International Development Institutions on the Environment. The CIDIE holds regular meetings to

exchange views and discuss all aspects of its Members' activities as they relate to environmental issues. The underlying philosophy, in the words of Mr Tolba, is "that environment and development are interdependent; that without conservation of natural resources long-term or sustainable economic growth is not possible."

Through their long experience in project finance, the CIDIE Members have reached a conclusion which, especially in the context of the European Year of the Environment, is well worth repeating here:

- environmental damage can be prevented or greatly reduced at a cost which is financially acceptable to borrowers; and

- environmental protection measures can often be shown to have economic benefits that exceed their economic costs. In other cases, qualitative or not readily quantified benefits, particularly from avoidance of irreversible effects, may readily justify the cost of protection. In most cases, preventive measures give more effective protection at less cost than later reformatory measures.

Roads and railways, for example, are often constructed in areas previously used for agricultural or forestry purposes and ways and means have to be found to reduce the local socio-economic impact. Also, to the extent that the new motorway or railroad disrupts local road networks, adaptations have to be made to allow for traffic flows. Drainage has a major impact and here too the necessary steps have to be taken. Noise and visual impact are possible negative by-products of infrastructure projects of this kind and the effects need to be minimised.

Adds Jean-Pierre Daubet, a technical adviser for transport projects: "Generally, the possible effects have been taken into account by the authorities in the planning stage. Available impact studies may indicate the benefits of sunken roads, walls, screens of trees, or the isolation of the dwellings directly affected for noise and/or visual impact reduction. Our task is to make sure that the studies point in the right direction and to offer an expert second opinion. When such studies are not available we will evaluate the environmental impact ourselves or, depending on the nature of the project, request that an impact assessment be made before we report to the Management Committee."

In an urban setting, the effects of investment in transport infrastructure are most keenly felt. Says Daubet: "From an economic point of view, the benefits of road or railroad links in a city context are obvious. Our aim is to balance the economic merits with a minimum of harmful environmental consequences." The balance is strikingly favourable in the case of bypasses, which the Bank has financed in most of the Community's Member States. Reducing congestion and city traffic, these bypasses allow for a cleaner traffic flow at a constant speed around the city limits.

Port construction or extension raises a series of questions about environmental impact. On the level of urban planning, a choice has to be made by the authorities on competing forms of land use: land development, housing, or port development? If port development has been selected, the effects of large-scale dredging on the eco-system have to be established. How will marine life be affected, and, second, how will the spoil be disposed of?

Water and air pollution may become environmental hazards once the harbour is operating and the Bank appraisal takes in the measures to reduce these. Oil leaks at berths and waste water dumping can be countered by adequate

harbour facilities and policing of the port. The use of appropriate techniques for the transfer of dry bulk cargo, such as cement, fertilisers, iron ore, and coal is vital for minimising negative effects.

Airport construction and extension projects are approached in a similar way. Explains Albert Grünberg, who appraises airport projects: "There are numerous environmental consequences that have to be analysed: the choice of the location, the effects of airport construction (e.g. earth moving and pile driving) and, especially once the airport starts operating, the noise exposure of the local residents. As noise levels are the combined effect of the lay-out of the airport, aircraft used, the airlines' flight schedules, airport authorities, have room for manoeuvre."

On a world-wide scale, international bodies adopt standards to limit noise and the airplane manufacturers follow by producing new generations of less noisy jet engines. Locally, the airport authorities have ways of limiting noise levels, for example by the establishment of preferable routings, restrictions on engine testing, or even the operation of a bonus scheme for conscientious airlines, offering a reduction of the landing fees.<sup>(1)</sup>

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### Water projects

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Within the broad range of infrastructure projects financed by the EIB, water projects stand out for their environmental benefits. Sewage and waste water treatment, water resource development and drinking water supply, and erosion control all have a positive environmental impact on balance. Most of the water projects financed by the European Investment Bank fall in the first two categories.

The scale of sewerage and waste water treatment schemes varies widely. In the United Kingdom, for example, projects range from small municipal schemes to medium-sized collective schemes providing sewage transport and treatment for several municipalities to clean-up efforts of the Mersey estuary near Liverpool. In France, Greece and Italy, the Bank has financed major anti-pollution water projects for large towns: in Marseille and Bordeaux, the gulfs of Athens, Thessalonica, Macedonia and Volos, the lagoons of Trieste and Venice, the Gulf of Naples, schemes in the main rivers leading to the Adriatic, just to mention the larger investment projects. These projects help to realise the objec-

tives of the Barcelona Convention on protecting the Mediterranean.

The EIB input consists in reviewing the promoters' plans, to see which technology has been adopted and how the co-ordination of the various constituent elements of the project has been set up. Two on-going clean-up efforts, in the Po basin and in the Venice lagoon, have been oriented with the help of EIB advice and may serve as examples.

"In 1983", says George Toregas, the EIB engineer involved, "the Bank was asked to finance individual sewerage schemes and industrial waste-water treatment in three regions in the basin of the river Po: Lombardy, Piedmont and Emilia-Romagna - a fifteen year programme, divided into several phases. When we discussed the project with the authorities, it became obvious that, although all the right steps were included they could be more coherent from an environmental point of view, and more co-ordinated from an administrative and control perspective. Together with the Italian government, we were able to suggest a solution. A co-ordination unit was set up, consisting of the three regions and the Ministry of the Environment together with the National Institute of Research in Italy. They are now putting together a database with all relevant information on the sources and types of pollution, and they carry out a monitoring programme evaluating the effects of the measures taken so as to re-adjust the objectives in a dynamic, interactive manner."

Twin problems play a role in the Venice lagoon. At times, high waters cause flooding of parts of the city and closing the lagoon presents a solution. But, in the greater Venice area, the direct and indirect discharge of polluting effluents into the lagoon has to be severely reduced to avoid major environmental consequences through the build-up of effluent levels once the lagoon is closed. The EIB finances a series of collection networks and treatment plants to this end. Together with the authorities, the project has been designed to reduce the discharge of a wide range of effluents with maximum efficiency. Adds Toregas: "The fact that the Bank has financed comparable projects elsewhere gives us engineers a unique perspective. Project promoters appreciate this and are generally open-minded when we suggest improvements to the project design."

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(1) For an overview of transport infrastructure projects financed by the EIB, see EIB-Information No. 49 of July 1986.



The EIB has also financed many water resources development and supply projects, bringing the quality of drinking water up to EEC standards in parts of the United Kingdom, Germany, Italy and Greece. More and more often, these projects are an integral part of large-scale environmental programmes in which water supply schemes form an important ingredient. EIB loans help to develop new water resources where the quality of existing resources is threatened by over-pumping, which lowers aquifer levels and may cause salinity intrusion in coastal areas. Elsewhere, ground waters are polluted by nitrates (the result of over-fertilisation) and industrial waste-water. The development of new resources becomes necessary since this kind of environmental pollution is reversible only in the long term.<sup>(1)</sup>

### Continuing involvement

The European Year of the Environment will serve to underline the importance of environmental protection to the public at large.

For the EIB and its staff, concern for the environment is standard practice. Adds EIB President, Ernst-Günther Bröder: "We are always learning and, no doubt, improvements can still be made. All the same, the European Investment Bank has a long record when it comes to taking into account the environmental aspects of its project financing activities and to supporting environmentally oriented projects. Recent years have seen a continuing growth in lending specifically for environmental protection. 1986, so far, has been a top year. The official lending statistics show a

share of close to 10% (702 million ECUs) for environmental projects. Actually this figure only relates to projects where environmental considerations have played a conclusive role in the decision to finance. When we take a broader definition and include investments in geo-thermal and hydroelectric power plants, global loans for energy saving and pollution control, district heating, most water projects and erosion schemes, cultural heritage projects and forest protection, we arrive at a figure in the order of 1.5 billion ECUs, or over one fifth of the Bank's lending. There is no doubt that we have a continuing role to play in improving the quality of our environment."

(1) For an overview of water projects financed by the EIB, see EIB-Information No. 50 of October 1986.

## Community support for SMEs: The European Investment Bank and "NCI IV"

The recent Council Decision to authorise the Commission of the European Communities to borrow up to 750 million ECUs for "the financing of small and medium-sized undertakings in industry and other productive sectors"<sup>(2)</sup> is the latest in a long line of co-ordinated Community action aimed at encouraging investment by SMEs. Known as "NCI IV" (because it is the fourth authorised borrowing under the New Community Instrument), this authorisation forms part of a broader programme to make available a total of 1.5 billion ECUs, from this year, for the financing of investment projects implemented by smaller scale enterprises in the Community. The European Investment Bank has been invited by the Council and has agreed to provide a further 750 million ECUs from its own resources (essentially the funds the EIB borrows in its own name on capital markets), with the same scope and on the same conditions as provided for in the "NCI IV" Decision. As under previous Decisions, the EIB continues to implement NCI lending and, for the first time, also undertakes NCI treasury management.

The provision of finance for SMEs is not a new departure for the EIB. The Bank has been lending in support of investment undertaken by SMEs since the early years of its activity, first directly then through its global loan facility. This is basically a mechanism whereby lines of credit are opened to banks and other finance institutions for on-lending, in smaller amounts, for SME investment projects corresponding to the EIB's financing criteria. The first global loan was introduced in 1968, because experience indicated that co-operation with national or regional financing bodies, which have extensive local expertise, would enable the Bank to make its resources available to a much wider

spread of SMEs than it could do directly.

In the last five years (1982-1986), the EIB has advanced a total of over 3.3 billion ECUs, from its own resources, in the form of global loans for SME investment and these have helped finance some 10 000 smaller scale industrial ventures, mainly in the less developed regions of the Community.

Nor is the joining of forces to channel finance into a priority area of investment in the Community a new initiative: with the finalisation of "NCI IV" and the direct participation of the EIB's own resources to provide an integrated financing package, it might be useful to provide a brief

outline of the characteristics and development of New Community Instrument (NCI) finance and how it fits into the lending activity of the European Investment Bank.

### A Background to NCI

The New Community Instrument came into being in October 1978, when the Council of Ministers authorised the Commission of the European Communities to borrow up to 1 000 million ECUs in the name of the EEC and gave a mandate to the European Investment Bank to carry out lending operations with these funds "on behalf of, for and at the risk of the Community"<sup>(3)</sup>. The objective was to increase the combined credit capacity of the Community and to provide another finance source for capital investment, "as means to reinforce Community action in the fight against unemployment, low levels of investment and lack of convergence in the performance of the economies of Member States".

The mechanism of NCI is such that the Commission of the European Com-

(2) Council Decision No. 87/182/EEC of 9 March 1987, O.J. L 71, 14/3/1987

(3) Council Decision No. 78/870/EEC of 16 October 1978, O.J. L 298, 25/10/1978

munities raises funds on financial markets, in the name of the EEC and on its credit, to be used by the European Investment Bank, under Community mandate, to make loans for investment projects furthering economic objectives to which the Community attaches particular priority. These objectives are determined by the Council of the European Communities and, over the eight years that NCI has been in existence, there has been a progressive evolution of the eligible fields of investment.

The first tranche of "NCI I", for up to 500 million ECUs, was activated in May 1979 and was to be used "for investment consistent with priority Community objectives in the infrastructure and energy sectors"<sup>(1)</sup> i.e. for investment in infrastructure assisting regional development and for energy projects which helped to reduce the Community's dependence on imported oil. In July 1980, the Council activated the second tranche of borrowing (for up to 500 million ECUs) and specified that up to 400 million ECUs was to go to energy and infrastructure investment, as before. The remaining 100 million ECUs was earmarked, in November 1980, for advance factory construction (used in Ireland) and for housing as part of the infrastructure necessary for industrial development (in the Italian Mezzogiorno).

When the Council authorised a second NCI facility of 1 000 million ECUs ("NCI II") in April 1982, it re-affirmed the importance of directing NCI finance into regional development infrastructure and energy production, but also expanded the scope of energy projects eligible by

underlining, "... the efficient use of energy, the replacement of oil by other sources of energy in all sectors and infrastructure projects facilitating such replacement..."<sup>(2)</sup>.

An important innovation was that the Council specified that productive investment projects of small and medium-sized undertakings should be able to benefit from NCI financing. This led to the granting of NCI global loans to finance SMEs outside the assisted areas already covered under the EIB's usual criteria for lending in support of regional development.

The Council's third authorisation was in April 1983 ("NCI III"). This was for an overall amount of up to 3 000 million ECUs, of which the first 1 500 million ECU tranche was activated by the Council in June of the same year. Again, priority was given to investment serving Community objectives in the energy sector (both production and rationalisation), to infrastructure for regional development and to productive investment by small and medium-sized undertakings, with a strong stress on projects designed "in particular to promote the dissemination of innovation and new techniques..."<sup>(3)</sup>.

A second tranche, for 1 400 million ECUs<sup>(4)</sup>, came into effect in July 1984 and covered the same areas of investment as before, except that support for industrial investment by small and medium-sized enterprises was given the highest priority: particularly that, "promoting the dissemination of innovation and new techniques, whose realisation contributes directly or indirectly to the creation of jobs..."<sup>(5)</sup>.

The areas of investment covered by the New Community Instrument are basically the same as those in which the EIB operates with its own resources and, since 1979, the Bank has handled loans from NCI resources as a part of its normal lending activity in the Community. NCI loans, under the three authorisations called "NCI I, II and III", total 5 463.6 million ECUs and constituted 14% of the EIB's total lending in the period 1979-1986 (See table below).

### Finance for SMEs

What stands out in a consideration of the successive NCI authorisations is that, originally conceived as a means of reinforcing Community action in the priority areas of infrastructure and energy, NCI resources have been increasingly directed by Council guidelines into meeting the financing needs of small and medium-sized enterprises in the productive sector. The growing importance accorded to investment by SMEs is highly appropriate in the context of current economic conditions in the Community, where problems of recession, unemployment and lagging competitiveness have led governments to aim at stimulating industrial investment. As SMEs make up over 95% of all industrial firms in the Community and account for over 50% of all industrial production and employment, facilitating investment by smaller-scale enterprises is considered as an important element in this process of economic revitalisation<sup>(6)</sup>.

It is, therefore, not surprising that the most recent NCI authorisation should be targeted entirely for projects that, "contribute to the industrial adjustment and the competitiveness of the Community, in particular by means of the application of new technologies and innovation" and are such that they "serve the Community's priority objectives relating to the financing of investment by small and medium-sized undertakings in industry and other productive sectors, taking

**Loans from EIB and NCI resources: 1979 - 1986**

Sector	EIB resources		NCI resources		Total 1979 - 1986	
	million ECU	%	million ECU	%	million ECU	%
<b>Energy</b>	<b>12 569.0</b>	<b>92</b>	<b>1 098.1</b>	<b>8</b>	<b>13 667.1</b>	<b>100</b>
Production	7 917.2		470.3		8 387.5	
Transmission/Storage/Supply	3 648.0		536.6		4 184.6	
Global loans	1 003.8	92	91.2	8	1 095.0	100
<b>Infrastructure</b>	<b>12 655.6</b>	<b>86</b>	<b>1 984.1</b>	<b>14</b>	<b>14 639.7</b>	<b>100</b>
Transport	4 317.4		453.0		4 770.4	
Telecommunications	3 638.5		411.3		4 049.8	
Water schemes	2 933.2		404.1		3 337.3	
Other infrastructure	994.9		684.2		1 679.1	
Global loans	771.6	96	31.5	4	803.1	100
<b>Industry/Agriculture/Services</b>	<b>7 616.2</b>	<b>76</b>	<b>2 381.4</b>	<b>24</b>	<b>9 997.6</b>	<b>100</b>
Industry	3 468.2		15.9		3 484.1	
Agriculture/Forestry/Fishing	5.4		—		5.4	
Services	160.9		—		160.9	
Global loans	3 981.7	63	2 365.5	37	6 347.2	100
<b>Total</b>	<b>32 840.8</b>	<b>86</b>	<b>5 463.6</b>	<b>14</b>	<b>38 304.4</b>	<b>100</b>

(1) Council Decision No. 79/486/EEC of 14 May 1979, O.J. L 125, 22/5/1979

(2) Council Decision No. 82/268/EEC of 26 April 1982, O.J. L 116, 30/4/1982

(3) Council Decision No. 83/308/EEC of 13 June 1983, O.J. L 164, 23/6/1983

(4) The residual 100 million ECUs has not yet been activated

(5) Council Decision No. 84/383/EEC of 23 July 1984, O.J. L 208, 3/8/1984

(6) The definition of "small and medium-sized", which is based on the number of persons employed, differs considerably from country to country; the broad definition generally used by the Community is that of a firm with fewer than 500 employees and with net fixed assets of less than 75 million ECUs.

into account *inter alia* their regional impact and the need to combat unemployment<sup>(1)</sup>.

The EIB's role in administering NCI loans remains the same as under previous authorisations but now loans from the Bank's own resources have been more closely linked to the implementation of the "NCI IV" Decision. In effect, the Board of Governors of the EIB (one Minister from each Member State, usually the Minister for Finance) has authorised the Bank to:

- contribute towards implementing the NCI IV Decision;
- grant loans from its own resources, according to the same arrangements as those provided for in the NCI IV Decision and for a corresponding amount, in support of ventures implemented by SMEs outside assisted areas.

The extension of the EIB's geographical scope of lending, on its own resources, to cover SME investment projects located outside regional development areas is another new feature linked to the NCI IV Decision. In the past, EIB global loans for SME financing, except when they concerned advanced technology, environment or energy saving, were restricted to investments located in the less favoured regions of the Community. The addition of global loans on NCI resources, which had no such limitation, meant that finance was available for eligible SME investment projects, whatever their location. With the Board of Governors' recent decision, EIB global loans on the Bank's own resources, for up to 750 million ECUs, can also cover non-assisted areas. It should be underlined, however, that the provision of finance for SMEs in regional development areas remains a priority for the EIB and that its resources enable it to respond to all eligible loan demands for this purpose.

#### **Sub-loans under the global loan facility**

From the point of view of an SME borrower, procedures for drawing credits on global loans, whether from EIB resources or from those of NCI, are the same. Applications are made to the intermediary institutions and not directly to the Bank. Appraisal of a project's economic, financial and technical viability is undertaken by the intermediary, which also arranges the security it requires. Disbursement of the sub-loans, which may cover up to half of the investment cost of a project and can vary in amount from 20 000 ECUs to 10

million ECUs, takes place after approval by the EIB.

Projects eligible for finance from either EIB or NCI resources are those with a total cost ranging between 40 000 to 20 million ECUs in the following areas:

- projects in industry, agro-industry, agriculture\*, fishing, tourism\* and hotels\* and in services related to the productive sector;
- industrial projects which involve the use of advanced technology, either on the level of the production process or on that of the product;
- energy saving projects involving the installation of equipment promoting a more rational use of energy in industry;
- industrial projects aimed at reducing pollution.

To qualify for sub-loans, projects in the first category must be promoted by companies having net fixed assets of less than 75 million ECUs and fewer than 500 employees. The EIB gives priority to independent SMEs, i.e. those with not more than a third of equity capital owned by a parent or holding company. The size of the beneficiary is not a limiting factor in regard to sub-loans for energy saving, promotion of advanced technology and environmental protection. Sub-loans from NCI resources are exclusively for independent SMEs.

Intermediaries usually make sub-loans available in the relevant national currencies. Interest rates are based on the prevailing rates on the financial markets and are fixed for the duration of a loan at the time of drawdown. A standard sub-loan can be for 8-12 years with, generally, a 2 year grace period on repayment of principal. Sub-loans can also be made available to provide leasing facilities and, in some cases, to enable the intermediary to take up equity participation.

The extent to which the EIB's global loan facility is taken up varies from country to country, but not because the Bank has a predetermined quota system of loan allocations. The EIB responds to demand for its funds and this demand depends on relative interest rates, the liquidity needs of the intermediary institutions and the ease with which they assimilate EIB loans, which are usually disbursed in a mixture of currencies, i.e. the possibilities offered by the authorities in each country as regards exchange risk cover.

In countries where global loans are not in operation, the EIB can grant direct loans for the financing of smaller scale investment in the same sectors as those covered by global loans.

\* not eligible for sub-loans from NCI resources

## **The European Financial Engineering Company comes into being**

Following a decision taken in June 1986 by the "Club" of institutions in the European Community specialising in long-term credit<sup>(1)</sup>, the European Financial Engineering Company (EFEC, or SEFI in French) was created on 10 April 1986. Its authorised capital has been set at 3 million ECUs, with subscribed capital standing at 2.55 million ECUs paid in as to 80%. The company's offices are located in Luxembourg at 10, boulevard Royal.

EFEC's management committee is composed of one representative from Istituto Mobiliare Italiano (IMI), one from Crédit National, one from the institution holding the presidency of the Club and one from the institution which is to succeed to the presidency. The Chairmanship of the company's management committee falls in turn to Crédit National and IMI, each performing the function for one financial year.

EFEC is receiving financial support from the EIB and the Commission of the European Communities during the start-up period. It has a light administrative structure, headed by Mr Jean-Pierre Bouillot, a financial engineer with a wealth of experience in company management and financing. EFEC's function will be to provide support in the form of studies and consultancy and information services for ventures, preferably those spanning national boundaries, undertaken by small and medium-sized enterprises in the industrial and service sectors in the Community's Member States. Emphasis will be on ventures involving advanced or innovative technology, with the objective of advancing the formation of an integrated common market.

(1) See EIB-Information Bulletin No. 50, October 1986.

(1) Cf. foot (1) pg. 9

## 1987 EIB Prize to Janette Rutterford



On 1 July, during a ceremony with the Members of the EIB's Management Committee and Lord Roll of Ipsden, Chairman of the London based bank of S.G. Warburg & Co. Ltd. and Chairman of the EIB Prize Jury (left), Janette Rutterford (centre) received the 1987 Prize from EIB President Ernst-Günther Bröder (right) for her thesis "An Empirical Investigation into the Effects of Corporate and Personal Taxation on Company Capital Structure". Mrs Rutterford obtained her doctorate at the London School of Economics in 1986.

In her thesis, she develops a rigorous theoretical model to quantify the tax advantage of corporate debt relative to equity under any tax system and submits this model to testing on two unique data bases – a time series of UK corporate debt-equity ratios during the period 1930 to 1986 and a cross-section of US, Canadian, UK, French, German and Japanese debt-equity ratios for 1983 and 1984.

Lord Roll commended Mrs Rutterford's thesis as "an excellent piece of work, the empirical portions being well marshalled and the analytical parts showing considerable ability. The very abundant material has been well used and the results well presented and argued". Mr Bröder underlined the significance of the subject, adding that, given the quality, he hoped and expected that Mrs Rutterford's work would serve as a basis for further research in the field of optimal capital structure.

The EIB Prize, consisting of 10 000 ECUs and a diploma, was instituted on the occasion of the 25 year anniversary of the European Investment Bank in 1983 to promote the study of topics related to investment and finance at academic institutions in the European Community. The prize is awarded biennially and was first bestowed in 1985. It will be awarded again in 1989. The Jury of the EIB Prize consists of Lord Roll, Chairman, and Professors Beniamino Andreatta (University of Bologna), Arnold Heertje (University of Amsterdam), Jacques Lesourne (Conservatoire National des Arts et Métiers, Paris), Michael MacCormac (University College Dublin) and Wilhelm Hankel (John Hopkins University, Bologna).

## ECU

Below are the ECU's values in national currencies, as at 30 June 1987; these rates are applied to the present quarter in preparing financial statements and operational statistics of the Bank:

DM	2.07288	Bfrs	43.0117
£	0.704028	Lfrs	43.0117
Ffrs	6.91563	Dkr	7.86263
Lit	1 501.61	Dr	155.610
FI	2.33240	IR£	0.773758
Ptas	143.637	Esc	162.497
		US\$	1.13278

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100, bd Konrad Adenauer  
L-2950 Luxembourg  
tel. 4379-1 – telex 3530 bnkeu lu  
telecopier 43 77 04

Department for Italy:  
Via Sardegna, 38 – I-00187 Rome  
tel. 4719-1 – telex 611130 bankeu i  
telecopier 474 58 77

Liaison Office  
for the United Kingdom:  
68, Pall Mall  
London SW1Y 5ES  
tel. 839 3351  
telex 919159 bankeu g  
telecopier 930 9929

Liaison Office  
in Lisbon:  
Avenida da Liberdade, 144-156, 8º  
P-1200 Lisbon  
tel. 32 89 89 or 32 88 48  
telex 15576 bnkeu p  
telecopier 37 04 87

Representative Office in Athens:  
Ypsilantou 13-15  
GR-10675 Athens  
tel. 724 9811  
telex 222126 bkeu gr  
telecopier 724 9814

Representative Office in Brussels:  
Rue de la Loi 227  
B-1040 Brussels  
tel. 230 98 90 – telex 21721 bankeu b  
telecopier: 230 58 27