

Innovating for **smart growth**
Made in Europe

Supporting **education and skills**
Backing **renewable technology innovation**

INFO

150



The EIB – The EU bank

July 2013

Editorial

Innovation and skills play a vital role in restoring sustainable economic growth, job creation and competitiveness to ensure the EU maintains its position in the global economy. At the same time, they are particularly prone to cuts in times of austerity. As the EU bank we are extending additional support as part of our countercyclical action in order to help secure ongoing investment in infrastructure, education and innovation to sustain a comparative advantage and continue creating high-value jobs in Europe.

The ingredients are well-known: an education system that stimulates excellence is the basis for an economy built on high-skilled jobs; risk finance can help Europe lead in technologies from life sciences to eco-innovation as every start-up needs the right investors to reach its full potential; and new products and services flourish with the necessary financial backing to bring them to market.

This requires both innovative thinking in terms of creating new financial products that help bridge the current financing gaps, but also long-term investments that create the right conditions for innovators to develop the future and secure Europe's competitive edge on a global scale.

This edition of EIB INFO puts the spotlight on innovation and skills in a broader sense, from research and development to new technologies and production processes, from pioneering internet start-ups to established corporates that continue to reinvent themselves.

The EIB is a major partner in supporting projects, from financing ambitious research to attracting funding for digital networks. By maximising our resources and developing new financing instruments in partnership with others, we can play a key role in ensuring that innovative ideas turn into reality.



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Innovating for smart growth

Made in Europe



In order to re-start growth, Europe needs to target investments in research, education and information and communication technologies. Smarter ways to use its resources are also needed. The EIB is supporting long-term investment in innovation and skills, as well as tailoring its products to find smart solutions to Europe's pressing problems.

“ Europe's competitive advantage can only come from knowledge and innovation”, President Werner Hoyer underlined at the annual meeting of the EIB's Board of Governors in Brussels in May. The Bank intends to finance an additional EUR 15bn of innovation investments over three years. “[We] will invest in innovation to enhance long-term growth potential”, he added.

Innovation is a main driver of productivity, competitiveness, long-term economic growth and employment in advanced economies. In an increasingly competitive global environment, investment and policies focused on research and education are becoming more important.

Tackling youth unemployment

They are also a way to address the problem of youth unemployment in Europe. President Hoyer emphasised that the EIB

would “do its utmost” to help improve the situation. One way could be to link favourable loan conditions to the creation of new jobs for unemployed young people. The Bank has already gained experience in financing vocational training schemes at EU level, pan-European student loan programmes and the modernisation of educational facilities itself. In 2012, the EIB supported education and skills with some EUR 1.5bn in loans.

President Hoyer added that the EIB stands ready “to do even more” as Europe needs educational systems and the labour force to compete successfully in tomorrow's economy. According to a recent Accenture survey, 47% of European business leaders consider the workforce a competitive advantage for European industry.

The EIB supports investments that improve education quality, especially through upgrades of schools and university facilities. In this way, EIB lending in the education

“Europe's competitive advantage can only come from knowledge and innovation.”

sector can help improve the skills base of young workers in the EU and thereby contribute to creating new employment opportunities.

Investment in technology transfer initiatives is also necessary to promote innovation by bridging the gap between academia and business. The spread of knowledge through an economy creates value and promotes productivity, growth and diversification. But access to finance – especially long-term finance – is a major obstacle to innovation.

According to the same Accenture survey, 31% of European business leaders see insufficient support for R&D and technology innovation as among the most important long-term barriers to Europe's internation-

al industrial competitiveness. 97% of respondents view technology innovation as important to competitiveness, with 56% believing it is critical. For the EU bank, this is a top priority, and in 2012 alone it invested some EUR 9bn in innovation and skills in Europe.

Boosting competitiveness

The EU remains a world leader in high value added products and high tech. Between 2004 and 2010, it created three million extra jobs through service exports, in which the Union accounts for a quarter of all trade worldwide according to the European Commission. Technological advances from life sciences to environmental improvements ensure that the EU's research and development sector is leading-edge.

Europe's future economic growth and jobs will increasingly have to come from

“Investing in innovation and skills is crucial for Europe's productivity and will help secure competitiveness and jobs in the future.”
EIB President Werner Hoyer

its expertise. As the pace of innovation accelerates the Bank is flexible enough to respond quickly to needs with tailored and targeted funding in areas that are critical for growth.

Combining EU budget funds with EIB loans, risk sharing achieves just that. A good example is the Risk Sharing Finance Facility (RSFF), where the EIB and the European Commission have each set aside up to EUR 1bn as a capital cushion to support financing operations with a higher risk profile than the average EIB lending portfolio. By the end of last year, this mechanism had helped some 100 companies and re-



innovation in products, services and business models. Bringing new products and services to market is one of its biggest challenges. That is why this is a focus of the EIB's lending for innovation (some 27% of total knowledge economy lending since 2000).

The Bank is helping to finance a European innovation system that stimulates excellence, backs ambitious research and cutting-edge innovation, and funds digital networks. Targeting such investments is of particular importance as they are most vulnerable to cuts. The EIB can help secure them and maximise resources using

search infrastructures obtain more than EUR 10bn in loans.

In 2012, the European Investment Fund – the EIB Group's specialised arm for innovative SME funding – started the commercial launch of an instrument that is similar but tailored to smaller businesses: the Risk Sharing Instrument (RSI). The RSI aims to encourage banks to provide loans and leases to SMEs undertaking research, development or innovation projects. Increased use of such joint initiatives can help restore the link between pure and applied research, leverage existing funds and catalyse private investment.

Designing innovative financial solutions

Accelerating the technological deployment and the commercialisation of new breakthrough innovations is important. But so is the financing of smaller innovative companies, which are especially feeling the crunch.

Again, the EIF plays an important role in improving access to finance through venture capital operations. This is even more essential as the crisis has reduced the willingness of private venture capital funds to take risks on early-stage innovative enterprises. The EIF in particular seeks to support young innovative companies fostering productivity and employment in the EU, backs cutting-edge R&D projects and develops financing instruments for knowledge-intensive companies.

The EIB has also started reviewing its product offering to increase and better target its support for investments in research, development and innovation. Proposals on how to improve its product range and use its expertise to leverage existing resources are



underway. The most recent new product is the so-called Growth Financing Initiative. This pilot initiative targets rapidly growing companies that expand beyond the scope of venture capital funding but lack the cash flow stability and asset quality to have access to sufficient debt funding. Initial capital support of EUR 150m is established under the RSFF together with the European Commission (see also next article).

Support for innovation and skills has a positive impact on competitiveness. It also helps to fight unemployment, poverty, social exclusion and inequality. Moreover, RDI contributes to tackling critical issues from safeguarding human health to protecting the environment and finding new solutions to other social challenges that help to improve people's lives.

Digital economy key to long-term growth

Internet-based information and communications technologies (ICT) will continue to be an essential driver of productivity growth. Broadband networks enabling

high-speed internet access have a strong positive impact on long-term GDP growth and will contribute to creating an estimated 2.1 million additional jobs in the EU between 2006 and 2015.

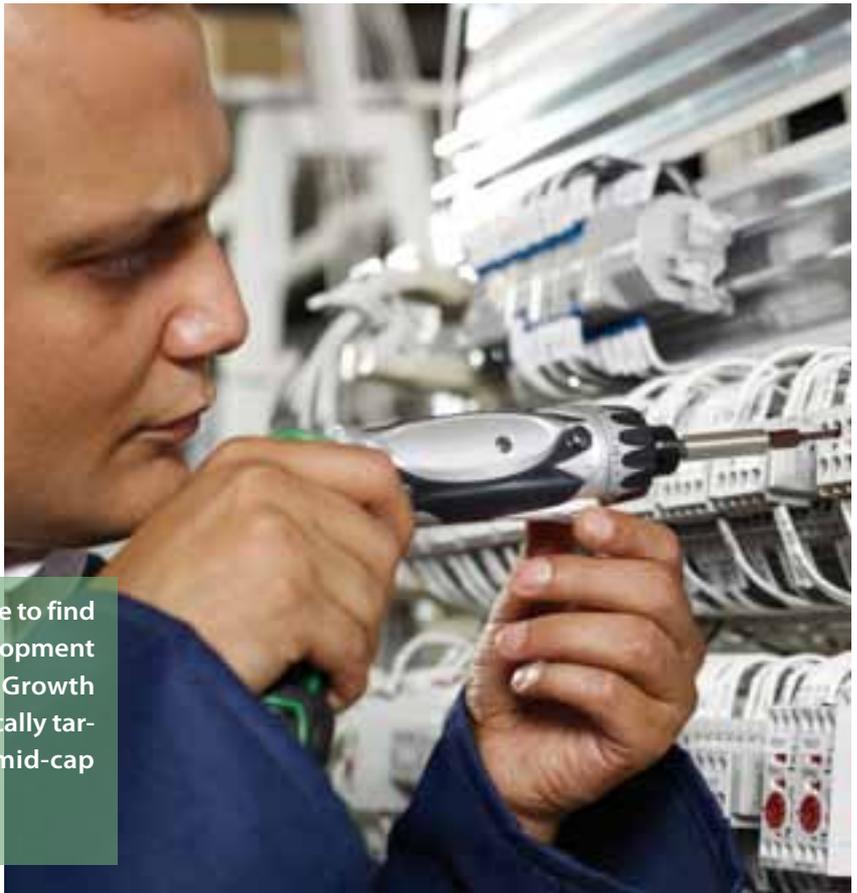
Investing in telecoms infrastructure is thus necessary to support Europe's growing data needs. It is also one of the main goals of the EU's Digital Agenda as every business is increasingly a digital business. So super-fast internet, mobile networks and

cloud computing are priority areas for the Bank. In 2012, the EIB provided some EUR 1.5bn in loans for information and communication technology investments as part of its funding for innovation.

But financing needs are huge. Under the project bond pilot initiative launched last year with the Commission, the EIB is seeking to attract private investors to boost funding for key infrastructure projects, including broadband. ■



Stepping up support for innovative mid-caps



Many rapidly growing companies struggle to find appropriate financing for research, development and innovation. A new instrument, the Growth Financing Initiative (GFI), is set to specifically target the innovation financing needs of mid-cap companies in Europe.

Mid-caps, i.e. companies which have more than 250 but fewer than 3 000 employees, are key drivers of innovation. They invest larger shares of their revenues than the industry average in research, development and innovation (RDI), according to a recent PwC study (R&D investment in the EU, September 2012) covering some 28 000 mid-caps across the EU. At the same time, they often struggle to find appropriate financing to support new RDI activities and growth plans. There is a market gap between the period when rapidly growing companies expand beyond the scope of venture capital funding but lack the cash flow stability and asset quality to have access to sufficient debt financing.

Two-thirds of the companies surveyed mentioned a lack of appropriate senior debt financing, while one third indicated an interest in higher risk junior debt financing. The average investments foreseen by these companies over the next three years varied between EUR 15m and EUR 50m.

Addressing market gaps

The new pilot initiative offers innovative European mid-cap companies a broad range of tailor-made financing solutions ranging from direct debt to quasi-equity risk and mezzanine instruments. The EIB will provide financing of between EUR 7.5m and EUR 25m to support companies' European research, development and innovation investments.

The initiative targets highly-innovative companies and established family-owned companies with proven but growing business models. The new product complements the EIB's existing mid-cap lending and aims to fill the gap in lending for mid-cap RDI, an area currently underserved by the EIB Group.

With initial capital support of EUR 150m, this pilot initiative is being established under the Risk Sharing Finance Facility (RSFF), a joint instrument of the EIB and the

European Commission that is targeted at higher risk, high value added RDI projects.

Streamlining financing

Moreover, in order to respond swiftly to companies' requests, a streamlined process has been established reducing the time needed to secure GFI financing, with the aim of being able to close an operation within 3-4 months. This will be achieved through simplified approval procedures, the use of external resources and the creation of dedicated in-house teams. The streamlined process is expected to bring substantial cost-efficiency gains.

"Mid-cap companies have a key role to play in innovation, competitiveness and growth in Europe. Despite the economic crisis, they have been trying to maintain their RDI investments but are facing challenges due to increasing financing constraints in the market place," EIB President Werner Hoyer said. ■

In brief

Commission makes proposal on EIB lending outside the EU



In May the European Commission put forward a proposal on the financing of operations supporting investment projects outside the EU by the EIB on the basis of an EU budgetary guarantee. "This proposal is about ensuring the EIB is fully able to support the EU's international goals over the coming seven years. In particular, we want the EIB to play an important role in the global fight against climate change and in supporting the economic development of countries aiming to join the EU and of our Southern and Eastern neighbours," said Olli Rehn, Commission Vice President for Economic and Monetary Affairs and the Euro. The proposal is expected to be adopted next year.

Most of the Bank's financing operations outside the Union are carried out under an EU budget guarantee, set out in external mandates for different regions of the world: pre-accession countries, Southern and Eastern neighbours and Partnership countries in Asia, Latin America and South Africa. In all these regions, the Bank provides finance and technical assistance for local private sector development, social and economic infrastructure and climate action projects.

By working under an EU budget guarantee, the EIB can leverage EU funds in a cost-efficient and scalable manner and thereby increase the external policy impact.

Prioritising the fight against youth unemployment

Fighting youth unemployment is a key priority for the EIB and the Bank is working on new tailor-made financial products that will incentivise companies to recruit young people and put them in vocational training schemes.



Speaking at a conference "Europe: Next Steps" organised by the Berggruen Institute on Governance in Paris on 28 May, EIB President Werner Hoyer stated that the EIB is stepping up its lending activities significantly in the period 2013 to 2015 in order to support growth and jobs in Europe. He also made clear that the EIB is not a panacea. Rather, Europe needs a concerted approach by all relevant EU institutions, the Member States and the private sector.

EIB attaches high importance to SMEs



"The EIB sees its support for small and medium-sized businesses in the current economic climate as the number one priority," EIB President Werner Hoyer stated during the annual meeting of the EIB's Board of Governors in Brussels. Following the EIB's paid-in capital increase of EUR 10bn last year, the EU bank will lend an additional EUR 15bn to SMEs during 2013 to 2015.

The EIB is also open to exploring new financing tools to help alleviate the financial constraints on SMEs. The EIB, the European Commission and the European Central Bank (ECB) have been discussing how to strengthen the credit supply for SMEs, especially in Europe's peripheral countries, by securitising bank loans to SMEs. The talks are at an early stage. As President Hoyer emphasised during the meeting, prudence is needed, "bearing in mind the experience of the subprime crisis."

A public-private initiative to support social enterprises



The European Investment Fund (EIF), the specialist provider of risk finance to benefit SMEs across Europe, has launched the Social Impact Accelerator (SIA), with the collaboration of private sector investors. This is the first pan-European public-private partnership for social impact investing.

This pilot initiative addresses the growing need for equity finance to support social enterprises, a segment of the business world which is becoming increasingly instrumental in promoting social inclusion, providing alternative sources of employment for marginalised social groups and contributing to growth.

Support for innovation and skills in numbers



The EIB has built up a decade of experience in the knowledge economy, lending over EUR 123bn since 2000, of which some EUR 9bn in 2012 alone.

Loans worth over EUR 10bn have helped to turn good ideas into real business by providing finance to 96 companies and research infrastructures under the Risk Sharing Finance Facility.





EIB support for innovation and skills has helped to secure employment across Europe and is contributing to creating sustainable and competitive jobs for the future. The Bank will boost its lending for innovation and skills by about 25% this year to reach some EUR 11bn.

Last year the Bank provided

- EUR 7bn for research development and innovation projects, including EUR 1.5bn in loans for information and communication technology investments
- EUR 1.5bn in loans for education and skills

Upgrading Finnish universities

creates smart spaces



Already a leading country in terms of education, Finland has ambitious plans for its universities to be among the first in the class. The EIB is supporting several projects to modernise their facilities in and outside Helsinki, helping to introduce new learning concepts and reap important energy savings.

State-of-the-art research facilities that create a modern learning environment based on interaction, use the latest technologies and provide a meeting place for research to connect with business is a prerequisite for world-class education.

A EUR 120m loan is supporting the construction of a new laboratory building, as well as the refurbishment and upgrading of 17 other research and teaching facilities of five universities in the Helsinki area. The new facilities offer improved practical training possibilities for students and better academic practice connections to teaching and research personnel.

Stimulating interactive learning

In addition, a EUR 150m loan is backing the construction of new teaching and research buildings, as well as the refurbishment and upgrading of research and teaching facilities of ten universities outside the greater Helsinki area, which hosts around 100 000 students.

This project seeks to revolutionise teaching by designing new premises that best support learning, studying and the creation of new knowledge. "We believe the traditional campus concept needs to be renewed," Olli Niemi, Adjunct Professor of University Properties of Finland Ltd, which is overseeing the project, explains.

"New ways of learning and working through the application of information and communication technology, social media and digital games are changing our needs for spaces, places and services on university campuses," he adds.

"Our new university campus vision is that of an open, inspiring and attractive interdisciplinary and international meeting arena, where knowledge is created effectively and quickly used to improve competitiveness, new business and wellbeing," Professor Niemi continues. "The EIB financing accelerates these important investments in our educational infrastructure and thus helps us realise our vision faster than otherwise possible."

Educational infrastructure is crucial to ensure high quality teaching for students and to expand research capacities with a focus on the applicability of results. For example, some of the satellite research campuses are already closely connected to industry, which helps innovative ideas to be turned into business.

Cutting down on energy consumption

All works now financed started last year and are expected to be completed by end-2016. The various projects aimed at modernising the existing facilities will also help to improve usability as well as bringing savings on running costs. Estimated

CO₂ emission savings as a result of the upgrades are in the order of 10%. University Properties of Finland Ltd looks at CO₂ and energy consumption from the overall perspective, taking into account the operational metrics. The facilities' versatility and interoperability are promoted to generate more operational hours per week for the building and more working hours per person per space. This perspective guides the use of the buildings towards overall energy efficiency. Improved space efficiency has saved more than 11% energy and at the same time increased social interaction and encounters – which is good since the creation of new knowledge is a social process. ■

"Our new university campus vision is that of an open, inspiring and attractive interdisciplinary and international meeting arena."



Helping Ireland

rise to its educational challenges

As Ireland seeks to improve its education system and increase capacity in schools, EIB funding has played a role in supporting a wide range of projects, from teaching to research.

From children taking their first nervous steps in primary school to adults seeking a vanguard position at the cutting edge of research in innovative fields such as biomedical sciences, investment in education will benefit Ireland and Europe as a whole.



Meeting baby boom needs

It is estimated that Ireland will need 70 000 additional school places over the next seven years after undergoing something of a population surge in the past decade. In early 2012, the Minister for Education and Skills, Ruairí Quinn TD, announced a five-year construction programme to meet these requirements. In June of the same year, the EIB agreed to provide a EUR 100m loan in support of a project to build more than 550 new classrooms, involving modernisation and construction work in 35 primary and 12 secondary schools across the country, with a particular focus on areas of rapid population growth. Teaching conditions will be improved, and new facilities will be provided for 15 500 primary school pupils and 6 650 secondary level students. Delivery on the additional capacity is expected in December 2014.

Separately, but also forming part of Minister Quinn's five-year plan, a second EUR 50m loan was agreed in November 2012 with the aim of cofinancing the construction of eight new schools. The new facilities will be spread throughout Ireland and consist of six secondary schools and then a primary and secondary sharing a

single campus. Mr Quinn hailed the EIB for deciding to support this second project, pointing out the Bank's "renewed confidence in the Irish State and our recovery programme."

World-leading medical research

"The EIB is committed to enabling education investment in Ireland," says EIB President Werner Hoyer. "The agreement to support the construction of new schools also complements the backing for the redevelopment of University College Dublin." A loan of EUR 90m was extended to UCD in 2011 as part of an ongoing plan to make the campus more modern, vibrant and at the forefront of environmental sustainability: keeping faculties and facilities within reach, and improving conditions for the university's 24 500 students and 2 000 staff. The project is due to be completed in 2015, and a notable feature is the BREEAM (Building Research Establishment Environmental Assessment Method) "excellent" rated science facility, which is among the first of its kind in Ireland.

"The EIB is committed to enabling education investment in Ireland."

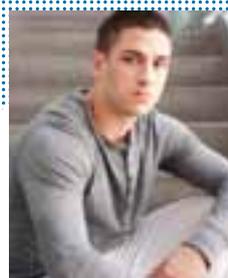
Trinity College Dublin, meanwhile, has seen its own partnership with the EIB bear fruit. Recognised as a world leader in medical research in fields such as cancer therapy and immunology, the venerable university has unveiled its new biomedical research institute, half-funded by a EUR 75m loan from the Bank in 2008. The institute brings together 800 post-graduate researchers in all biomedical sciences, from biochemistry to pharmacy, medicine and engineering, while areas may be rented out by private companies to increase revenue and bridge the gap between academia and industry. In a single 3 000 m² area comprised of laboratories, seminar facilities and collaborative working space, ideas will be shared to create a cutting-edge centre of excellence, where today's discoveries can become the next generation of treatments for patients. ■

Supporting education and skills in Poland

The EIB contributes to maximising the use of public funding to bridge shortages in times of austerity and spur growth in the economically less advanced regions of the EU. In Poland, a dedicated loan is backing human capital investments to make its regions more competitive.

Investment in education, vocational education, training, information and communications technologies as well as SMEs is a key ingredient in increasing competitiveness and promoting entrepreneurship. In order to keep up support in these areas, a EUR 2bn so-called structural programme loan is backing a targeted programme across the Polish regions that is co-financed with EU structural funds and also benefits from European Social Fund grants.

Part of this programme is aimed at strengthening the quality of schools and modernising the vocational education and training system in order to match the type of skills that employers are seeking. More than 90% of funds under the programme have already been allocated and projects are already bearing fruit. Here are a few examples.



A trade for a new life

Those in the care of centres such as the Educational Centre for Troubled Adolescents in Jaworze rarely get a second chance. For ten adolescents the project run by the Vocational Education Centre in Katowice was just such an opportunity.

The boys who arrive at the Educational Centre for Troubled Adolescents often come from a deeply troubled background and dysfunctional families. For many of them, escaping from this vicious circle is a challenge impossible to achieve without external help. Lucyna Pietrzyk, director of another Vocational Education Centre in the neighbouring town of Bielsko Biala, knows the problems of the

Jaworze centre inside out. A few years ago she completed a practical work placement there when she was studying resocialisation.

“Preparing the project for boys at the centre I knew that it would give them a better start in life. Perhaps it would be their only chance. I really wanted to help them”, explains Lucyna. Thanks to EU funding, ten of the best boys were sent on a carpentry course. The course included 40 hours of theory and 100 hours of practical application at the centre. The boys treated this chance seriously and discovered in themselves the skills necessary for the trade, which demands precision and a lot of patience.

Where there's a will, there's a way

The idea for the "First of all work – Integrational Employment Centres for those at risk of being excluded from society in the Zachodniopomorskie region" came from A4e, a British company which has been active in Poland for three years.

The year-long project was set up in partnership with the District Labour Offices in the cities of Szczecin, Stargard Szczeciński and Police. The aim was to create specialist centres in Szczecin and Stargard Szczeciński which would help the unemployed return to work.

Thanks to the project 178 people found permanent employment or were given a long-term traineeship. During the first 13 weeks

of a new job each participant could continue to rely on the support of their personal advisor. Some still come into the A4e centres, despite having found a permanent position.

"Though I am a qualified economist, my dream was to run a florist shop. I hadn't worked for 17 years and to be honest, I never thought I would ever be able to start my own business", admits Barbara Zatorska. "My dream came true in the end. I completed a course for professional florists and I have my own flower shop in Szczecin."

Tailor-made products for using structural funds

EIB framework loans finance multi-scheme investment programmes, in a single or multiple sectors, usually implemented by a public sector entity, whether national, regional or local, and carried out over a number of years. During the crisis, a special kind of framework loan, the structural programme loan, has become an important instrument. It allows public authorities to access EU structural funds aimed at reducing regional disparities but which are only granted if local authorities are able to commit their own money first.

In times of austerity, it has proven difficult for some public authorities to finance their contribution, holding up investments that could enhance growth. The EIB's structural programme loans help to bridge this gap by financing part of the national contribution to investment in a wide range of priority projects that are supported by subsidies from the EU structural funds. The pre-financing of these contributions plays a key role in stabilising investment flows and securing growth and employment. In this way, the Bank also helps these regions take advantage of the EU funds available.

IT – the best choice

The State Higher School of Vocational Education in Elbląg knows very well how to encourage pupils of vocational high schools to continue their education in information technology with attractive information technology courses and lectures.

Today's computer society needs trained and professional staff able to deal with the demands of a modern economy based on information technology. Young people need to be encouraged to choose this as a professional career. "In recent years we have observed a fall in applications for IT studies", says Krzysztof Brzeski, project coordinator, Director of the Applied IT Institute in the State Higher School of Vocational Education in Elbląg. "In the city there are two technical schools which created IT profiles a few years ago. That's why we aimed the project at pupils of these schools and decided to get them interested in IT."

The pupils had the opportunity to participate in real lectures. Particularly popular was the open lecture on artificial intelligence

and robotics given by Dr Henryk Olszewski. "For the pupils we prepared courses certified by the Microsoft IT Academy and Cisco, such as the ones students at our university attend," adds the project coordinator. "A positive result at the end of the course allows the pupil to sit the exam to gain the certificate. There is a fee for the examination but if results are positive students and pupils pay 50% less. Certificates proving practical professional skills are welcomed by employers".

"I found it really useful to be able to use equipment that we do not have at school," says Marek Kotzy, a pupil of the School of Mechanics in Elbląg. I was able to see what a student's life looks like and what it's like to study at university. This encouraged me to study here. In the future I would like to work as a computer network administrator". ■

Helping innovative mobile applications go global

Shazam started in 2000, even before the advent of smartphones, as a simple service designed to connect people in the UK with music they heard, but didn't know. Thirteen years later, Shazam is one of the world's most recognised mobile consumer brands with on average more than 10 million tracks tagged each day.

From start-up to internet star

Founded by entrepreneurs Chris Barton, Philip Inghelbrecht, Avery Wang and Dhiraj Mukherjee, Shazam's technology collects an acoustic fingerprint of a song or other medium and matches it against its database. In the summer of 2008, Shazam launched its mobile music application on the iTunes App Store and this immediately became one of the most popular applications downloaded by iPhone users. Shazam is in the top ten most downloaded iPhone apps of all time. In addition to music, Shazam has also expanded to include TV and branded content.

Since March 2005, Shazam has been growing by more than two million new customers every week, connecting more than 350 million people in over 200 countries and 33 languages to music, TV shows and international brands.

A boost for entrepreneurship and innovation from the EIF

Shazam is backed by a number of equity funds including DN Capital supported by the European Investment Fund (EIF), the EIB Group's specialist provider of risk finance to benefit small and medium-sized

How many times have you caught part of a tune on the radio or in a bar and not known the song title? With more than 30 million tracks currently stored in Shazam's music recognition database we need not have this problem anymore. And the EIF has helped the company to grow.

enterprises, micro-enterprises and start-ups across Europe. The EIF works with a network of venture capital and private equity funds to support independent management teams raising funds from a wide range of investors to provide risk capital to growing SMEs. It also backs funds targeting early stage companies that are developing or using advanced technologies in industry or services.

"To realise their full potential, the internet generation of entrepreneurs needs adequate access to finance. Because of critical support from our funders, Shazam has grown from a small start-up to a global market leader," Andrew Fisher, Executive Chairman of Shazam explains. "It's only part of the recipe for success, but having the right financial support at the right time has helped Shazam to conquer new markets."

In the case of Shazam, the EIF channelled its EUR 10m support via DN Capital, a growth capital investor specialised in supporting leading digital media, e-commerce, software and mobile applications companies. DN Capital has worked closely with Shazam through its period of growth, helping to build its senior management



team, and has been a key supporter of Shazam's international expansion since its initial investment.

"DN Capital's support has been instrumental in facilitating the growth of our company," says Fisher. "Such investors are key to turning ground-breaking innovations into globally leading businesses like ours is today, thereby increasing the competitiveness of European companies," he adds. ■



Risk capital for early stage technology and industrial innovation

The EIF has been managing the EUR 5bn Risk Capital Mandate (RCM) on behalf of the EIB since 2000. The core objective of RCM is to support technology and industrial innovation through early stage, expansion and lower mid-market capital, with an emphasis on specialist funds investing in the EU and generalist funds in an enlarged Europe including the EU 28, EU Candidate and Potential Candidate and EFTA countries. RCM resources represent the lion's share of the EIF's investments. These have historically been complemented by EIF own resource co-investments of 10%.

Developing cutting-edge technologies that save lives

Belgian company Ion Beam Applications is developing and commercialising cutting-edge technologies and pharmaceutical and customised solutions in the field of oncology, used by some 3 000 hospitals worldwide. Its innovative proton therapy solution has been designed from the ground up to meet the needs of patients and clinicians. It is more affordable, easier to install and operate and offers a shorter time to first patient treated.

Every year 3.2 million Europeans are diagnosed with various forms of cancer. Although great advances continue to be made in research and treatment, the disease remains a serious health concern. The European Union has therefore taken action on various fronts to both save lives and improve cancer survivors' quality of life.

Backing innovative cancer therapy

One such initiative saw the EIB provide financing to Belgian multi-national Ion Beam Applications (IBA) for its research and development projects in the fields of cancer diagnosis and therapy. Headquartered in Louvain-la-Neuve and employ-

ing more than 1 200 people worldwide, IBA has installed systems across Europe and the US and is expanding into emerging markets.

With a EUR 50m loan under the Risk Sharing Finance Facility (RSFF), a joint European Commission-EIB programme for RDI projects, the project matches the EU objective



of establishing a competitive knowledge-based economy and the EIB's priority objective of backing research, development and innovation in Europe.

Supporting effective non-invasive treatments

Conducted between 2010 and 2013, activities comprise research, development, clinical trials and regulatory approvals related to the development of new products and to optimising and further developing existing products and equipment for the diagnosis and treatment of cancer.

IBA is heavily investing in proton therapy, which is considered by many as one of the most effective forms of non-invasive cancer treatments.

"Proton therapy is increasingly seen as the ultimate radiotherapy for cancer due to its superior dose distribution," says IBA's Chief Financial Officer Jean-Marc Bothy. "Higher doses can be delivered to the tumour without increasing the risks of side effects

and long-term complications, improving outcomes and quality of life for patients," he explains.

Unfortunately, up until now, few patients have benefited from this type of treatment due to its high cost and size. However, thanks to the RSFF financing, IBA has gone some way to changing perceptions with its therapy.

Bringing affordable solutions to market

The technology is bringing an affordable solution to the market and making proton therapy more accessible for more hospitals worldwide and therefore more patients.

"Physicians will be in a position to deliver the most effective clinical cancer treatment known as Intensity Modulated Proton Therapy to the benefit of patients. This new proton therapy system is not only simpler to install and operate, it is also more easily financeable," adds Bothy.

Prototypes have already been developed and, according to Bothy, this cutting-edge technology will be available to hospitals worldwide as early as 2015.

Crucially, this innovation could save many lives in the years to come. In addition, support for such innovative therapies helps to cut healthcare costs and will make sure Europe's industry keeps its competitive edge in the future. ■



"Physicians will be in a position to deliver the most effective clinical cancer treatment known as Intensity Modulated Proton Therapy to the benefit of patients."

Innovative finance for innovative ideas

The current economic climate and the budgetary constraints in the EU Member States mean that we must find ways to do more with less. Combining EU budget funds with EIB loans, risk sharing achieves just that. For example, the Risk Sharing Finance Facility (RSFF), where the EIB and the European Commission have each set aside up to EUR 1bn as a capital cushion to support financing operations with a higher risk profile than the average EIB lending portfolio. EU financial support can be crucial when it comes to backing higher risk, high value-added research, development and innovation projects, which increasingly find it difficult to get funding.

By the end of last year, this mechanism had helped some 100 companies and research facilities obtain more than EUR 10bn in loans.

In 2012, the European Investment Fund – the EIB Group's specialised arm for innovative SME funding – started the commercial launch of an instrument that is similar but tailored to smaller businesses: the Risk Sharing Instrument. This aims to encourage banks to provide loans and leases to SMEs undertaking research, development or innovation projects. Increased use of such joint initiatives can help restore the link between pure and applied research, leverage existing funds and catalyse private investment.

Accelerating the technological deployment and commercialisation of new breakthrough innovations is important. But so is the financing of smaller innovative companies, which are especially feeling the crunch.

Upgrading broadband networks in Hungary

Economic dynamism increasingly depends on modern broadband connectivity. In Hungary, the EIB is supporting the upgrading and expansion of the fixed and mobile broadband telecommunication networks, providing better coverage and choice for consumers.



The availability of superfast internet has become an important economic factor, as it is a precondition for businesses to be able to deliver innovative products and services. But non-commercial users of smartphones and tablet computers also increasingly want to be able to go online wherever they go, so access to networks and related services is ever more in demand.

Boosting broadband coverage

Hungary has been lagging behind its European peers in terms of available fixed and mobile broadband access compared to the EU average. A EUR 150m loan is helping Magyar Telekom to further develop telecommunications infrastructure in order to meet the increasing demand in terms of population coverage and quality of services provided, thereby helping to bridge the digital divide in the country.

The EIB is building on its successful cooperation with Magyar Telekom and its parent company Deutsche Telekom. In 2008 a EUR 200m EIB loan financed the upgrad-

ing and development of mobile networks in the country.

The new loan is co-financing the further development of mobile networks – 3G and Long-Term Evolution (LTE), also known as 4G, as well as fixed line telecoms infrastructure (Next Generation Access, copper and cable) – over the period 2010-2013.

Better and faster coverage for millions

Today, the expanded fixed broadband network has already enabled ultra-high speed (up to 100 Mbit/s) services to reach over one million Hungarian households. The rollout of the mobile broadband network has led to an increase in 3G coverage from around 75% to 80% and helped to expand LTE/4G network coverage from 10% to around 30% of the population, which is currently close to 10 million.

The rollout is expected to have benefits for consumers, making more comprehensive and better quality mobile and fixed line services available to a wider customer base

at more competitive prices and providing a choice between the different offers.

Keeping Europe at the forefront of the internet age

The project also supports the Digital Agenda, a flagship initiative of the Europe 2020 strategy for smart, sustainable and inclusive growth, through further development of modern mobile and fixed line infrastructures, the key platforms for the provision of advanced broadband services. The Digital Agenda for Europe aims to get every home and town in Europe 'broadband ready'.

As businesses are increasingly becoming digital, demand for state-of-the-art networks is increasing. Tomorrow's digital services – from streaming TV to cloud computing to e-Health – rely on fast, effective broadband connections. So very and ultra-high speed internet, mobile networks and cloud computing are priority areas for the Bank. In 2012, the EIB provided some EUR 1.5bn in loans for information and communication technology investments. ■

Financing **aerospace innovation**



The EIB is helping European aeronautics leader EADS with its research and development (R&D) programme. The company is improving aircraft aerodynamics and flight control systems, with benefits of lower pollution and increased safety.

ment, which demonstrates the solidity of our relationship and our joint will to accompany the sustainable development of air transport."

A new EUR 300m EIB loan will support this innovative work, bringing to EUR 800m the Bank's total backing for R&D by the group.

"Innovation and research are at the heart of EADS' mission and are essential to guarantee the long-term success of the group," says Harald Wilhelm, Chief Financial Officer of EADS & Airbus.

The EADS Group is a global leader in aerospace, defence and related services, employing around 133 000 people at more than 170 sites worldwide. It is the EU's largest investor in R&D in the aerospace sector and the 33rd biggest investor in R&D in any sector worldwide. The amount EADS has invested in R&D since 2000 adds up to more than EUR 28bn.

Helping to reduce emissions and noise

This new funding will be focused on developing products which will cut the impact of aviation on the environment through lower CO₂ and nitrogen emissions and reduced noise. It will serve to develop effective solutions that will have a direct impact on aeronautics design and production, such as by improving aircraft aerody-

namics and optimising safety and flight control systems.

With air traffic growing faster than any other transport sector, achieving similar or better performance while reducing emissions is becoming a core challenge for the industry.

"The EIB is one of our privileged finance partners, which has been supporting EADS for several years in developing ever more innovative technologies," Mr Wilhelm adds. "We very much appreciate this new agree-

Leading-edge technologies key to future

For EIB Vice-President Philippe de Fontaine Vive the loan "demonstrates our priority commitment to innovation and R&D in Europe". "The Bank aims to help develop a successful and competitive economy by focusing on leading-edge technologies, which hold the key to the future in terms of sustainable development," he adds. This sector is also a source of employment for young people." ■





Backing renewable technology innovation

Innovation in the wind sector remains key to the development of more competitive products and services geared to ever more challenging demand

Innovation is particularly important in areas where technology is developing at an accelerated pace such as renewables manufacturing. The EIB supports Spanish company Gamesa's research, development and innovation activities, which are helping to improve wind turbine technology and cut energy costs.

“Innovation in the wind sector remains key to the development of more competitive products and services geared to ever more challenging demand,” says Ignacio Martín, Chairman and CEO of Gamesa, one of the world's leading wind turbine manufacturers. The company, which specialises in sustainable energy technologies, mainly wind power, received a EUR 260m loan to support its research, development and innovation (RDI) activities in the field of wind turbine generators.

“This EIB loan on favourable terms will enable us to carry out our ambitious product development programme and meet the present and future needs of our communities with cutting-edge technologies,” Martín adds.

Investing in the future

The EIB is heavily involved in financing investment to enhance the competitiveness of the European economy, support-

ing projects involving RDI, the spread of new technologies and the development of renewables technologies in particular.

“The EIB's commitment to RDI – especially in a sector with such great potential and importance as renewables – is key to ensuring a secure, sustainable and competitive energy supply for Europe,” comments EIB Vice-President Magdalena Álvarez Arza, responsible for operations in Spain and Portugal. “The Bank's contribution goes beyond providing long-term finance in



600 jobs

New funding is set to finance the creation of some 600 new jobs in R&D

the current credit crunch. With this loan we are investing in the future and laying the foundations for the development of new products and technologies that will bring quality growth in the years ahead," she adds.

With 19 years' experience and 27 000 MW installed in 42 countries, Gamesa is a global technological leader in the wind industry. Concretely, the loan is supporting Gamesa's RDI investment programme to shape its current product portfolio by

launching new on-shore turbines and developing new off-shore wind platforms with greater capacity and lower energy costs. The project will aid the development of an important renewable energy technology and strengthen the company's capacity for innovation and competitiveness. The programme will be carried out up to 2015 in Gamesa's R&D centres in Bilbao, Pamplona, Madrid and Glasgow.

Building on technological developments

This is the third of Gamesa's RDI projects supported by the EIB. With the help of previous EIB funding, the company has developed innovative and proprietary technologies, namely the 'building blocks' for all its future turbines. The new funding of its current RDI portfolio will further enhance its technological leadership by supporting the deployment of the already developed technologies in marketable products, in particular for new on-shore low-wind speed location platforms and off-shore applications.

The company has production centres in the main wind markets – Spain and China, the global production and supply hubs – while maintaining its local production capacity in India, the US and Brazil. Sales outside Spain accounted for more than 85% of all MW sold in 2011.

Gamesa is also a world leader in the development, construction and sale of wind farms, having installed close to 6 000 MW and possessing a portfolio of 18 000 MW in Europe, America and Asia. It is a major innovator with around 30 patents or inventions each year, which place it among the top ten institutions in Spain with a high number of inventions. It has a collaborative approach with research centres spread across Europe and fosters partnerships with external suppliers. For example, part of its RDI is centred on an innovation campus that has attracted a cluster of highly innovative SMEs and mid-cap companies.

The new funding is set to finance the creation of some 600 new permanent jobs in R&D during the implementation period, most of which require a high-skill workforce.

Maintaining a leading edge in renewable technologies

Given the scarcity of funding for R&D, particularly in Spain where the economic crisis is taking its toll, EIB financing plays an important role in making renewable technology products more sophisticated and cost efficient.

Technological innovation in the renewables sector is developing at an accelerated pace. Not only does it have a positive impact on the environment and the industry, but it also benefits energy clients by driving down costs and making 'green' electricity more affordable.

Europe is home to a number of leading producers of the equipment used in electricity generation from renewable energy sources, such as wind turbine generators, solar panels, inverters, power converters and generators. They are faced with a sharp decrease in public support for renewable energy in Europe, overcapacity and intense competitive pressure. In their quest to reduce the cost of energy generated from renewable sources, manufacturers are continuing to increase their investments in new technologies. The competitiveness of Europe's industry rests on its technological leadership and a large home market. Four out of the ten leading wind turbine manufacturers in the world have their home base in Europe. They are supported by a close supply chain formed by European component suppliers and service providers.

The EIB started lending to the supply chain of renewables equipment in 2004. Since then, the total lending volume to the sector has reached over EUR 2bn, mostly to support RDI projects. Within the same time frame, lending to energy generation from renewables amounted to some EUR 18bn.

The financing of RDI projects in the field of equipment for renewable energies in Europe complements the Bank's established role in supporting investments in wind and solar farms, which contributes to achieving the EU decarbonisation targets and preserving Europe's leading role in the sector. ■

Securing the future of Europe's cultural heritage

The economic crisis is putting efforts to conserve Europe's cultural heritage under strain. What can be done to secure the financial future of these valuable assets? A conference organised by the EIB Institute and Europa Nostra in London in May provided some suggestions and answers regarding innovative financing for cultural heritage.

The conservation and management of cultural, artistic and architectural heritage involves a delicate balancing act: not only is it linked with urban development, tourism and the creative industries, but it also brings together international organisations, national and local authorities, and public and private donors and stakeholders. And investors' eyes may be looking elsewhere.

Commercial and private investors, when faced with the uncertainty of returns on their outlay and mindful of possible budgetary cuts in the public sector, may in turn be reluctant to pursue cultural investment. At the same time, and in times of crisis, national and local authorities may want to divert finance away from heritage and towards other areas which may appear more conducive to economic recovery.

Many organisations may be involved in cultural asset management: actions can be poorly coordinated and simply bringing involved parties together can prove troublesome, which in turn leads to fragmentation. When it comes to funding these tangible assets, innovation and strategy are needed, and yet these are the precise things that may have been overlooked, to the detriment of the wider angle of what heritage can bring to an economy.

Benefits in coordination

While the economics of heritage have been addressed, there has been rather less research into the direct or indirect benefits that surround it. There are opportunities in tourism, in leisure, in the multiple uses of heritage assets and in the development of

areas surrounding key sites, urban or otherwise. Heritage sites are invariably a work in progress, and innovative self-sustaining revolving financial instruments could be especially apt: philanthropic organisations and ethical funds may look at the opportunities to invest and reinvest capital, in conjunction with other schemes such as grants and sponsorships. Non-financial and indirect benefits can also be considered.

Investment in cultural heritage can have a positive impact on conservation, but also on the rejuvenation of urban areas, job creation and the environment, and this is how it should be seen. Heritage assets can generate the resources needed for their conservation, as well as the added benefits outlined, but too often this is done in an ad hoc manner. Focused and financially self-sustaining investment strategies that take everything into account, from the different parties involved and their requirements, to the external advantages for the local area, would eliminate an element of doubt as well as the feeling of opportunism and improvisation in cultural funding. Funds dedicated to sustainable urban development were established in the EU through the JESSICA initiative.

Realistic action plans

The EIB Institute seeks to harness the social, cultural and philanthropic activities of the EIB Group to promote European initiatives for the common good. Investment in heritage conservation contributes to sustainable development and growth and employment through its positive impact on local and regional economies. To this end, the Institute is supporting Europa Nostra, a citizen's movement and action group dedicated to the preservation of Europe's cultural monuments, sites and heritage. Together, they have identified the seven most endangered sites and monuments on the Old Continent and will undertake joint rescue missions to the sites. Experts from the Bank and the Council of Europe Development Bank will analyse and advise on how funding could be obtained through EU grants or loans, and formulate realistic action plans to be presented at the European Heritage Policy Conference, organised by Europa Nostra and scheduled for December 2013. ■

The seven most endangered heritage sites in Europe for 2013 :

- The Roman amphitheatre, Dürres, Albania
- The buffer zone in the city centre, Nicosia, Cyprus
- Vauban's 17th century fortifications of Briançon, France
- The Renaissance monastery of San Benedetto Po, Italy
- The 15th century monastery in Setúbal, Portugal
- The historic mining landscape in Rosia Montana, Romania
- The Armenian church of St. George, Mardin, Turkey.



50 years EIB in the ACP countries



Publications

- Supporting the EU's external action
- The EIB Results Measurement (ReM) framework
- FEMIP for the Mediterranean
- FEMIP Annual Report
- Annual Report on 2012 activity in ACP countries
- 50 years of EIB financing in the ACPs
- JASPERS annual report
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- **01-06/09/2013**
World Water Week, Stockholm
- **03-05/09/2013**
Economic Forum, Krynica (Poland)
- **17-19/09/2013**
Convergences Conference, Paris
- **19/09/2013**
Warsaw, the EIB Institute awards its first annual prize
- **30/09-03/10/2013**
European Innovation Summit, Brussels

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People@EIB

Evangelos A. Antonaros new External Advisor for Communication

The EIB has appointed Evangelos A. Antonaros as its External Advisor for Communication in Greece and Cyprus. During a long career as foreign correspondent for the German daily Die Welt in Athens, Rome and the Middle East, Mr Antonaros was repeatedly elected President of the Foreign Press Association in Athens. From 2004 to 2009 Mr Antonaros served as spokesman of the Greek government and was later a member of the Greek parliament (2009-2012).



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Please consult the Bank's website for the updated list of existing offices and their contact details.

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