



CIP Performance Report

March 2012



This report has been drafted by Commission staff responsible for the management of the Competitiveness and Innovation Framework Programme (CIP). It was written for the CIP Joint Programme Committees¹ but is also aimed at a wider audience interested in obtaining insights into the impact of the programme.

The report does not cover all the actions financed under the CIP since 2007. The three sub-programmes of CIP² have their own specific reports where more detailed information is provided on the activities carried out.³ However, this report gives a summary of the overall CIP framework programme's performance.

The picture painted by the performance report does of course depend on the progress of the actions. While some have been completed and have therefore already produced visible impacts, others started being implemented at a later stage and their impact may not yet be (fully) visible. This is not necessarily an indication of bad performance — the final picture will only be available when the programme has been completed (i.e. towards 2015).

¹ They consist of the Entrepreneurship and Innovation Programme Committee (EIPC), the Information and Communication Technology Policy Support Programme Committee (ICT-PSP Committee) and the Intelligent Energy Europe Programme Committee (IEEC).

² The Entrepreneurship and Innovation Programme (EIP), the Information and Communication Technology Policy Support Programme (ICT-PSP) and the Intelligent Energy Europe Programme (IEE).

³ http://ec.europa.eu/cip/documents/implementation-reports/index_en.htm .

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1. INTRODUCTION

The Europe 2020 Strategy — the EU's growth and jobs strategy for this decade — is aimed at boosting the competitiveness of European businesses and creating more jobs and prosperity. The **Competitiveness and Innovation Framework Programme (CIP)** is the key EU funding programme to address the challenges EU industry is facing today and in the years to come.

With small and medium-sized enterprises (SMEs) as its main target, the Competitiveness and Innovation Framework Programme (CIP) supports innovation activities (including eco-innovation and organisational innovation), provides better access to finance and delivers business support services to SMEs in all parts of Europe. It encourages better take-up and use of information and communication technologies (ICT) and helps to develop the information society. It also contributes to the increased use of renewable energies and energy efficiency.

As confirmed by the CIP final evaluation,⁴ **CIP remains highly relevant in the context of the recent economic crisis.** The CIP has made it possible to finance a number of growth-enhancing measures essential to the whole economy and especially to European small and medium-sized enterprises (SMEs).

The CIP is divided into three operational programmes:

- the Entrepreneurship and Innovation Programme (EIP);
- the Information and Communication Technology Policy Support Programme (ICT-PSP);
- the Intelligent Energy-Europe Programme (IEE).

A total of 3.6 billion EUR are earmarked for the three sub-programmes for the period 2007-2013.

This report gives a broad overview of the main achievements of the CIP since 2007. Its aim is to show concrete results and successes at the mid-point of the programme.⁵ More detailed information is provided in the specific performance reports, and in the final evaluations of the CIP and its three sub-programmes.⁶

⁴ CIP final evaluation, CSES, December 2011.

⁵ It is expected that the programme will be completed around 2017.

⁶ http://ec.europa.eu/cip/documents/implementation-reports/index_en.htm.

2. ENTREPRENEURSHIP AND INNOVATION PROGRAMME (EIP)

2.1. Introduction

The **Entrepreneurship and Innovation Programme (EIP)** seeks to boost competitiveness, innovation and the promotion of entrepreneurial culture as conditions for growth — they are essential to the economy as a whole — and especially important for small and medium-sized enterprises (SMEs).

The main objectives of the programme are to support, improve, encourage and promote:

- access to finance for the start-up and growth of SMEs and investment in innovation activities;
- the creation of an environment favourable to SME cooperation, particularly in the field of cross-border cooperation;
- all forms of innovation in enterprises;
- eco-innovation;
- entrepreneurship and innovation culture;
- enterprise and innovation-related economic and administrative reform.

Several instruments are used to achieve these objectives: CIP financial instruments for SMEs; services in support of business and innovation; eco-innovation first application and market replication projects; policy analysis, development and coordination of innovation policy actors. Other actions focus on promoting entrepreneurship and innovation culture or reducing administrative burden.

More than 2 145 million EUR are earmarked for the period 2007-2013 under the EU budget. In addition, third countries participating in the EIP⁷ are also contributing financially.

2.2. Main achievements

The EIP final evaluation⁸, completed in April 2011, assessed the relevance, efficiency, effectiveness, information and awareness, utility and sustainability of the programme, with a specific focus on its main components: financial instruments, the Enterprise Europe Network, and innovation actions. The evaluation confirmed that the **EIP is on track to achieve the anticipated impacts**. It also underlined that ‘it is addressing the needs, problems and issues it was designed for and it is doing so in a particularly efficient way at European level.’ The Programme is proving a real benefit to end-users, particularly SMEs.

⁷ Albania, Croatia, FYROM, Iceland, Israel, Lichtenstein, Montenegro, Norway, Serbia, Turkey.

⁸ EIP final evaluation, CSES, April 2011.

Some of the main achievements and concrete results of the programme at this half-way point, are set out below.

Improving access to finance

Major market gaps have been identified with regard to SMEs' access to finance. The multiannual **financial instruments** in the form of guarantee schemes, risk-sharing facilities and equity and quasi-equity support were designed to facilitate access to loans and equity finance for small businesses and to act as catalysts for public and private investors. The positive impact on the economic situation and business prospects of participating SMEs takes the form of stronger business growth and employment sustainability. Between 2007 and 2011, these instruments have assisted more than 155 000 companies⁹ with underlying debt financing of 11.4 billion EUR under guarantees and with investment volumes of up to 2.2 billion EUR under venture capital. More than 186 000 jobs were created or maintained.

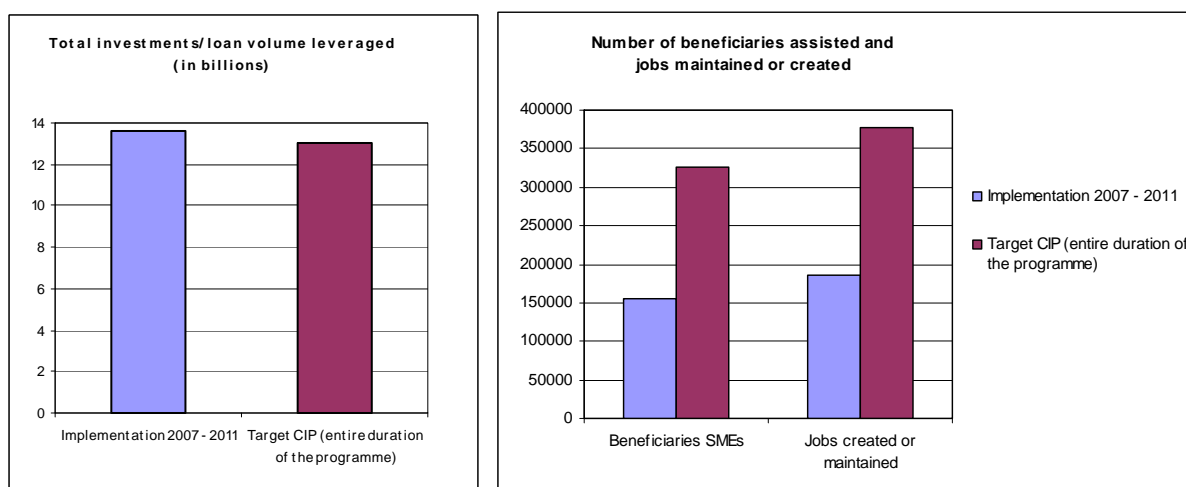


Figure 1: Total investments/loan volumes leveraged; Number of beneficiaries assisted, and jobs maintained or created.

Biotech GmbH, set up in 2006, produces and trades orthopaedic, trauma and spine implants, providing mobility solutions for patients in Hungary. In 2010, Biotech approached UniCredit Hungary for a **loan**, bought a new factory, warehouse and office in Diósd near Budapest, and also created a new R&D centre. Thanks to this recent **expansion**, the company is in a position to increase its production and research, and has the necessary infrastructure to take on extra staff — an additional 28 employees in 2011.

The **BaltCap Private Equity Fund**, which operates in the Baltic countries (Estonia, Latvia and Lithuania,) focuses on companies in their expansion phase. By the end of 2010 it had invested in five innovative SMEs in fields as diverse as aircraft maintenance, gas distribution and the media. The size of the fund is €63 million, of which €10 million comes from EU resources.

The **Chalmers Innovation Fund** is a business incubator affiliated to the Chalmers University of Technology in Gothenburg (Sweden). The fund supports the start-up of companies in the ICT and life science sectors. The size of the fund is €18.8 million, of

⁹ Commitments for CIP financial instruments may be made until 31 December 2013; The EIF has nine months beyond that to sign guarantee agreements with intermediaries. The availability period of loans may therefore run until September 2017. The total number of beneficiaries under this scheme will only be known then.

which €4.7 million comes from EU resources. By the end of 2010, the fund had supported 23 SMEs.

**Providing
business
support
services**

Despite the existence of the Single Market, doing business across borders in Europe is still subject to significant barriers for SMEs. **The Enterprise Europe Network has been in contact with more than two million SMEs each year.** More than half of the SMEs which used its services confirmed that they had accessed new markets or developed new products. For the partnership services, on average, the impact on turnover was 220 000 EUR per company. **The total impact on sales growth is estimated at 450 million EUR.** Between 2008 and 2010, 2 400 jobs were created by firms under partnership agreements. The trend of an increasing number of partnerships per year is expected to continue in the coming years.

The Enterprise Europe Network provides integrated services to SMEs through its more than **3 000 staff in 600 regional offices across 52 countries.**¹⁰ The Network helps SMEs to access market information, to find potential business and technology partners and to participate in the 7th Framework Programme for Research and Technological Development (FP7). It offers advice on funding and internationalisation services. More than 15 000 promotion, information, match-making and **brokerage events** have been organised, attracting more than **700 000 SMEs; 4 300 cross-border partnership agreements** between companies have already been concluded through the Network in just 36 months. The number of partnership agreements between SMEs is growing steadily. Some 18% of technology profiles have led to formal technology transfer agreements brought about by the Network. The success rate for turning research profiles into agreements to submit joint proposals under FP7 stands at almost 45%.

***Multi Protect** is an Estonian micro-company that develops substances for the chemical industry, including an environmentally friendly, non-toxic fire retardant. Thanks to the Enterprise Europe Network, it is **now represented abroad** by UK-based International Specialty Chemicals.*

*Guided by the Enterprise Europe Network, a tiny Italian company that designs high-precision sensors for the aerospace and environmental industries has **teamed up with a German biotechnology firm** to develop a biosensor with huge implications for stem-cell research.*

*In 2005, two former foresters launched a company named **Treemetrics**, after pioneering a way to estimate the timber production capacity of trees before they are chopped down. Working with the Enterprise Europe Network, the duo has signed on dozens of **new clients worldwide.***

The Network is also a very effective mechanism in receiving feedback from SMEs. Over 10 000 contributions from SMEs have been collected, in particular on public consultations (e.g. on the SME Panels on European Contract Law or the Working Time Directive).

Intellectual Property Rights (IPRs) stimulate research, innovation, inventiveness and creativity. Small and medium-sized businesses are frequently unable to make the most of

¹⁰ The Network's geographical coverage includes EU Member States, candidate countries, future candidate countries and other third countries. For more information, see http://www.enterprise-europe-network.ec.europa.eu/index_en.htm.

their creativity, because they do not incorporate IPR issues into their business strategies. Public support is often provided on a national basis alone or is entirely lacking. EU-level projects were therefore initiated to improve IPR support.

*During its three years of operation the **IPeuropAware project** organised 39 seminars on IPR enforcement and awareness-raising seminars in 15 countries with more than 400 participants, tested 72 new IP services and tools on SMEs, which were then implemented by the national IP offices, trained around 250 IP officials on enforcement issues, advised more than 4000 universities, public research organisations and SMEs and created a pan-European website, with input from nearly all the European National IP Offices.*

In addition to the IPR support in the EU, a dedicated helpdesk was set up to provide similar support for EU SMEs doing business in China. It started as a preparatory action supported by the European Parliament and has been funded by the EIP since 2010.

*The **China IPR SME Helpdesk** provides training for European SMEs on how to protect their IP when doing business in China. In its first three years of operation it served some 50 000 website users and offered over 400 private confidential consultations. As a result of Helpdesk advice, 30% of the users took a specific course of action (e.g. retaining lawyers, registering trademarks, undertaking administrative enforcement). This has increased the likelihood of effective protection for European SME-owned IPRs, and offered protection against infringement, something which could potentially inflict substantial damage costs.*

Improving sectoral conditions

The EIP programme helps to **improve framework conditions for certain industrial sectors**. Unlike direct grants to SMEs, policy support measures play a part in changing the regulatory environment and thus have a significant influence on all the businesses in a specific sector.

As an example, the EIP has helped to boost the competitiveness of the **construction industry**, which occupies an important place in the European economy. Not only does it generate around 10% of the GDP, it also provides 20 million direct jobs, mostly in micro and small enterprises. The programme has supported various competitiveness analyses of the construction sector.

*The conclusions and recommendations of the competitiveness analyses of the construction sector provide **key input to the forthcoming Communication on the sustainable competitiveness of the construction sector**. The new competitiveness agenda will seek a favourable investment environment, in particular for renovation works, TransEuropean Networks of transport, and skills and qualifications. At the core of the new agenda will be greater convergence in the way EU legislation is implemented at national level, facilitation of cross-border services, reduced administrative burdens and opportunities for innovative solutions.*

The programme also helped to improve framework conditions in tourism sector by creating or strengthening more than 15 **transnational tourism networks and project partnerships**. Furthermore, it supported several surveys on market trends in the tourism sector and studies with regard to the impact of the Cultural Routes on SMEs and with regard to the impact of the EU tourism policies on the sectors and its enterprises.

*The **transnational tourism networks and project partnerships** cover the majority of the CIP countries, with each of the networks joining together at least five countries. So far, around 100 beneficiaries have been directly involved. The networks have helped to*

identify practices to make the tourism sector more sustainable and competitive (e.g. a certification scheme for travel agencies), to integrate sustainability principles (e.g. by minimising the use of resources and production of waste) and to increase awareness (e.g. of sustainability-related practices and responsible tourism). The project partnerships on cultural tourism products have triggered better integration of SMEs in the transnational tourism supply chain along existing Cultural Routes.

The programme also lends its weight to innovation policy itself by making sector conditions, as well as business support, more innovation-friendly. The Europe INNOVA initiative, for instance, supports the development of sound, targeted policy measures through partnerships of relevant stakeholders, such as innovation agencies, technology transfer offices, business incubators, financial intermediaries and cluster organisations.

*In 2009, three new **Europe INNOVA partnerships** were set up on knowledge-intensive services (KIS-IP), eco-innovation (Eco-IP), and cluster cooperation (Cluster-IP). As a result, new policy tools are now being developed. The partnerships under the Innovation Platform for knowledge-intensive services (KIS-IP) succeeded in setting up three new (sector-specialised) venture capital funds and two new grants and voucher programmes.*

The EIP programme has also contributed to the development of policies and measures targeting demand-side innovation policies, i.e. the **demand for, uptake and diffusion of research and innovations** as opposed to the more traditional research and innovation funding. When the Lead Market Initiative (LMI) was launched in 2007, this was an emerging policy area in Europe. The LMI has been partly financed through the CIP. **Six pilot areas** (eHealth, personal protective textiles, sustainable construction, recycling, bio-based products and renewable energies) were established, and a broad set of policy instruments were used to stimulate innovation — such as legislation, public procurement, standardisation, labelling and certification — as well as complementary instruments — such as business and innovation support services, training and communication and financial support/incentives. The approach was effective in four out of six sectors.¹¹

*The study on the **Lead Market Initiative and sustainable construction** developed a generic ‘burden catalogue’ structure with deep analytical and qualitative insights into how information obligations translate into administrative burdens for companies. The conclusions and recommendations of the study will feed into the future sustainable competitiveness agenda in the construction sector in terms of ‘smart’ regulation and administrative burden.*

Demonstrating eco-innovation solutions

Each year, more than 50 **market replication projects** are awarded grants to make a greener economy a business reality. The programme has so far supported **134 eco-innovation projects** in sectors such as recycling, green business, the food and drinks sector, and the buildings sector. These projects will have an added demonstration effect, by showing to the market the growth potential of these eco-innovations. This grant scheme is **highly popular among SMEs**, being an effective means of addressing the needs of innovative SMEs in the sector. Approximately 65% of participants in these three calls were SMEs. The programme has a significant leverage effect, given that participants are required to provide 50% of the co-funding.¹²

¹¹ http://ec.europa.eu/enterprise/policies/innovation/policy/lead-market-initiative/final-eval_en.htm.

¹² EIP final evaluation, CSES, April 2011.

Following the first call in 2008, the very first grants were not made until 2009. It is therefore too early to predict what results and impacts the projects will have as they are still at the implementation stage.¹³ However, a dedicated study has recently been launched, to investigate the results and achievements, and to analyse the economic and environmental impact of ongoing and completed eco-innovation projects.

Greenbottle: *The eco-friendly papier mâché milk bottle is now available in UK supermarkets. Approximately 2.2 million tonnes of plastic is made into plastic bottles each year in the EU. Greenbottle offers an alternative which reduces the plastic used by 25% and generates 50% less carbon. Aimed primarily at the milk industry, the bottle comprises an outer shell made from moulded, recycled paper and a thin plastic inner lining. These can be easily separated out and then recycled by consumers using current systems.*

LEAKCURE project: *This project was selected as a finalist for the British Water Industry Achievement Awards 2011. The aim of the proposal is to achieve market uptake of a trenchless method of repairing small water pipe leakages. The technology does not require leakage detection or location. It self-penetrates the leakage, sealing and permanently repairing it. The proposer is an individual SME from Israel. The first target end-user is Thames Water, which serves the London area. Thames Water is looking for a solution to reduce the very high levels of leakage in its networks.*

TiLEATHER project: *At present, chrome tanning is the most commonly used technology for the production of tanned leather. The TiLEATHER project produces tanned leather using a new eco-friendly 'chromium free' process, with reduced energy use and waste water pollution compared with chrome tanning. The project involves the footwear industry in Spain and France, where three new lines of shoes will be launched on the market in summer 2012. It was awarded the best innovation project by the newspaper 'el Mundo' in November 2011. Until now they are the only ones to produce this type of leather and, due to their first-mover advantage, forecast an increased production rate and sustained demand from clients despite the economic adverse climate.*

**Improving
framework
conditions
for SMEs**

The EIP is also concerned with fostering **better framework condition for SMEs**. A key component is to facilitate exchanges of best practices between the CIP participating countries. For example, the EIP has financed ways of measuring and supporting Member States' progress in **simplifying the administrative procedures involved in starting up a small business**, working towards targets set by the Competitiveness Council. This takes the form of annual checks and of identifying and exchanging good practices between the participating countries. The result has been a fall in the average time and cost required to start a company in the EU, as illustrated by these graphs:

¹³ EIP final evaluation, CSES, April 2011.

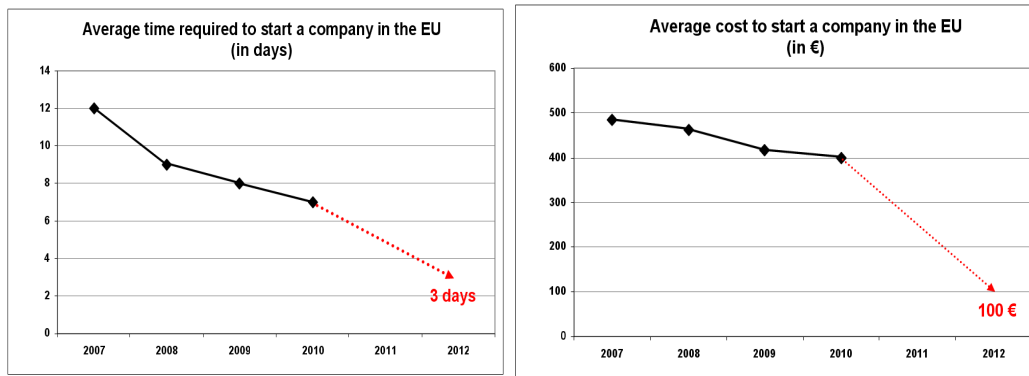


Figure 2: Average time required and costs to start a company in the EU

*There has been a major reduction in the time taken and the costs involved in starting up and running a small business. In 2010 the average time and **cost of starting up a private limited company** was 7 days and 399 EUR, compared to 12 days and 485 EUR in 2007; this improvement is partly due to best practice exchanges and benchmarking financed by the EIP.*

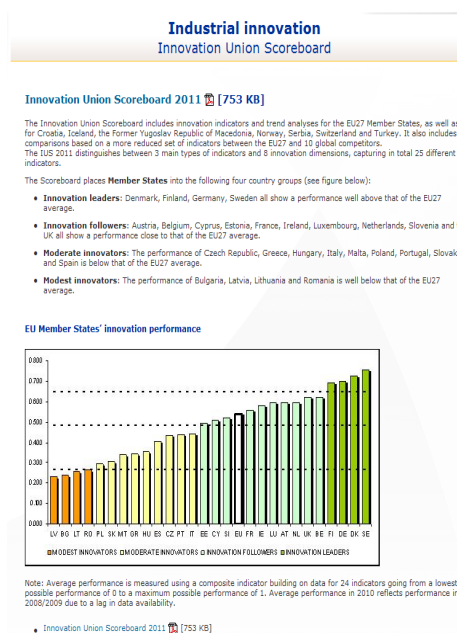
Monitoring policies, providing analysis and benchmarking

The EIP has also supported a wide range of policy-related measures such as **statistical analysis and benchmarking; policy monitoring and analysis**; workshops and exchanges of best practices between policy makers.

*Studies which involve collecting data and assessing market performance and the regulatory framework at industry level in the single market have identified strengths and weaknesses and **shaped the Europe 2020 flagship initiatives**, in particular the Communication on ‘A new industrial policy for the globalisation era’ and the ‘Innovation Union’ Communication.*

For instance, the **European Innovation Scoreboard** makes a yearly comparison of the innovation potential and performance of Member States and selected other countries, drawing on statistics from a variety of sources, primarily EUROSTAT and the OECD.

The reports are widely used by national and regional stakeholders in the EU in innovation policy-related conferences and a range of policy and academic workshops. The scoreboard is a reference source on innovation performance in the European innovation policy community. Its results are used as a background for press articles on innovation issues. It also benchmarks EU innovation performance against that of major economic partners (e.g. the US, Japan, South Korea, China, India, Brazil and Russia), so its results are used in a variety of international meetings as background documents for expert and political meetings.



Another example is the **Regional Innovation Monitor (RIM)**, which is a regional policy monitoring and benchmarking tool that collects information on sub-national innovation governance bodies, policies and measures. The target groups are regional policy makers and practitioners. It currently covers **20 countries and 203 regions**, and helps policymakers to increase the effectiveness of regional innovation policies and strategies.

*In 2011, the **RIM** included a thematic paper on **smart specialisation**. It showed that smart specialisation is not exclusively about focusing on a single industry sector, but primarily about fostering cross-sectoral linkages. The orientations expressed in this paper will be used in shaping regional policies and strategies by their inclusion in the Smart Specialisation Platform of the European Commission.*¹⁴

Yet another example concerns the **EU SME Performance Review annual reports** and the **SBA country factsheets**.¹⁵ The series of annual reports on the most important SME trends in the EU and the set of annually updated SBA country factsheets for a total of 37 countries (EU-27 Member States plus 10 non-member countries) are the result of extensive discussions and exchanges since 2009. These recurrent publications have helped to establish a **central monitoring tool for measuring the implementation of the Small Business Act (SBA)**. At the same time, they have greatly helped to raise the awareness of the general public on SME issues, and SBA implementation in particular. Over the reporting period, data have been cited in media articles, in both printed and electronic form.

***Topical studies on SMEs** are complementary to the Annual Report and SBA Fact-Sheets, and are conducted to provide data for evidence-based policy making. The study ‘Do SMEs create more and better jobs?’ has revealed interesting results on the contribution of SMEs to employment and has been instrumental in bringing SME issues to the attention of the media.*

*In the area of **sustainable industrial policy**, a number of studies were launched to identify the potential of sectoral approaches to limiting CO₂ emissions in a post-2012 international framework. These studies significantly contributed to the EU position on sectoral crediting and trading in international climate change negotiations. Options for a possible mandate for a more formal type of business engagement in the international climate change negotiations were also identified and presented at the Cancun Climate Change Conference in December 2010.*

***The analysis of European industry** formed the basis for the Commission Decision on sectors at risk of carbon leakage. That was essential in ensuring the competitiveness of EU industry while maintaining the environmental effectiveness of the EU emissions trading scheme. These studies made a significant contribution to the EU’s leadership role on international climate change negotiations.*

Boosting entre- preneur- ship

The programme has **boosted entrepreneurship and a culture of innovation** by its common initiatives in the areas of **entrepreneurship education** and female entrepreneurial activity, developed by the Commission and countries participating in the CIP. The Commission has supported nine Europe-wide projects in the field of

¹⁴ ipts.jrc.ec.europa.eu/s3platform.html.

¹⁵ http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/index_en.htm.

entrepreneurship education.¹⁶ These projects, carried out in close cooperation with national authorities, promote education for entrepreneurship and self-employment at school and university. Altogether some 70 000 students and young people and some 900 teachers have been involved. The added value is not limited to the number of direct beneficiaries, but lies also in the creation of new models that can be widely replicated.

At policy level, the focus has been on supporting the implementation of national strategies in this area and on preparing and training teachers, through exchanges of current practices in teacher education and training, and through EU co-funding of key European projects. In particular a framework for exchanging good practice was set up for preparing teachers to introduce entrepreneurship education into the classroom. In 2011, 45 countries participated in the exchange (including EU pre-accession and Southern Mediterranean countries), while practical workshops are planned for 2012, which will serve as models for introducing innovative methods of entrepreneurship education in all the Member States.

*In the Netherlands, following measures taken by the government to promote the **teaching of entrepreneurship** in schools, the number of students in secondary education who say they want to be an entrepreneur has risen from 13% to 23%.*

Female entrepreneurship is promoted by the European Network of Female Entrepreneurship Ambassadors and the European Network of Mentors for Women Entrepreneurs. The Ambassadors aim to have successful entrepreneurs campaigning on the ground to encourage women of all ages to set up their own businesses and become entrepreneurs. The Mentors support enterprises owned and run by women during the first few crucial years, by providing women entrepreneurs with advice and support with the start-up, functioning and growth of their businesses.

*The European Network of **Female Entrepreneurship Ambassadors** is active in 22 CIP countries. As a result of the first wave of Ambassadors in 10 countries, 210 new women-led companies have been started.*

Reducing administrative burden

The programme has also played a part in economic and administrative reforms, e.g. by helping to **reduce regulatory and administrative burdens**. A High-Level Group of Independent Stakeholders on Administrative Burdens was set up to advise the Commission on the action programme that was launched in 2007.

*By early 2012, the Commission had proposed **measures that reduce administrative burdens** by approximately 33%. The Council and European Parliament have so far adopted some of these measures, amounting to a reduction of almost 25%. The measures proposed by the Commission to date could lead to savings of more than 40 billion EUR.*

¹⁶ Projects focused on training teachers in entrepreneurship, producing innovative teaching material and promoting entrepreneurship among young people.

3. INFORMATION AND COMMUNICATION TECHNOLOGY POLICY SUPPORT PROGRAMME (ICT PSP)

3.1. Introduction

The **Information and Communication Technology Policy Support Programme (ICT PSP)** aims to stimulate innovation and competitiveness, and accelerate the development of a sustainable, competitive, innovative and inclusive information society. It supports activities to accelerate innovation and implementation of ICT-based services and systems through the wider uptake and better use of ICT and the exploitation of digital content by citizens, governments and businesses.

Particular emphasis is put on areas of public interest, given their weight in the European economy, and the unique solutions that ICT can bring to the challenges facing society, such as, health and ageing, inclusion, energy efficiency, sustainable mobility, access to cultural heritage, digital libraries and e-learning, as well as efficient public administrations.

Public policy has a leading role to play in these areas, as stressed through the EU strategy and EU policy goals expressed first in the i2010¹⁷ initiative, at the launch of the CIP, and now in the Digital Agenda for Europe.¹⁸

The major hurdles for a wider and better use of ICT in those areas include the unavailability of ICT-based services, the lack of interoperability of solutions across the Member States, as well as the market fragmentation of the information space and of ICT-based solutions.

The ICT PSP helps overcome barriers to the development of an information society. It aims to steer key stakeholders towards the EU policy goals. In doing so, the programme also helps develop markets for innovative ICT-based solutions and for the innovative use of digital content, namely in areas of public interest. This will open a wide range of new business opportunities, in particular for innovative SMEs that provide such solutions.

The ICT PSP supports mainly pilot actions aimed at solving interoperability issues and validating innovative ICT-based services in real settings. It also supports networking actions to develop experience sharing and consensus building. These actions are complemented by benchmarking the development of the information society in Europe, and supporting policy development and coordination through analysis and awareness raising actions.

The ICT PSP covers technological and non-technological innovations that have moved beyond the final research demonstration phase. It does not support research activities, but may cover, when needed, technical adaptation and integration work in order to achieve the objectives.

The ICT PSP has a budget of 728 million EUR for the period 2007-2013. In addition, third countries participating in ICT PSP¹⁹ contribute financially.

¹⁷ http://ec.europa.eu/information_society/eeurope/i2010/index_en.htm.

¹⁸ http://ec.europa.eu/information_society/digital-agenda/index_en.htm.

¹⁹ Croatia, Iceland, Liechtenstein, Montenegro, Norway, Serbia and Turkey.

3.2. Main achievements

After five years in operation, 170 actions will have been supported through the ICT PSP, representing nearly 420 million EUR.²⁰

Overall, public bodies represent 39 % of participants in the proposals of the Call. SMEs represent 29 % of the participants, and the remainder (32 %) comprises other private entities such as intermediaries or user associations.

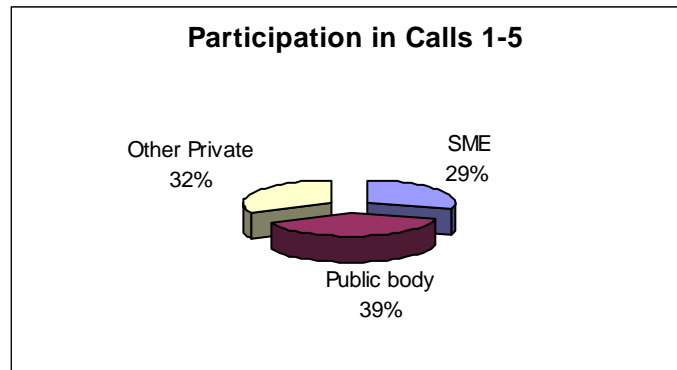


Figure3: Participation in ICT PSP (over 2007-2011)²¹

The ICT PSP projects are still running, and it is too early to draw conclusions about the results and impact.²² However, several ongoing projects are showing promising developments.

Progressing towards pan European services

Improved interaction and cooperation between public administrations, citizens and businesses owes much to the support given to **large scale pilot projects, bringing stakeholders**, such as decision makers and public authorities in Member States, together with service providers and reference centres across the EU, to address interoperability issues harmonising approaches and progressing towards **pan European services**.

*The **PEPPOL** pilot project builds automated and simplified processes for procurement. By testing and validating solutions, **front-runner countries not only save costs on procurement processes but make it easier for companies to bid for public sector contracts anywhere in the EU, thus making an important contribution to the single market. 11 countries are taking part in the pilot actions.** Estimates vary, but based on experience from Sweden and Portugal, the total savings from simplified electronic procurement on a European level roll-out may be as high as 50 billion EUR.*

*The **epSOS** pilot project validates and improves patient summaries — which include general and medical information about patients and their current medication — and ePrescriptions, to make the required medicine available in any foreign pharmacy*

²⁰ Five calls have been organised from 2007 to 2011. The fifth call is still under negotiation.

²¹ Call 5 participation is still under negotiation; numbers are based on the implementation report. Based on former experience, the proportion of SME participants is likely to drop when contracts are signed, as the ratio in the implementation plans is based on the proposition. In FP7, we saw a decrease of some 30 % between self-declarations at proposal level and checked data at project level.

²² CIP ICT PSP Second (final interim) evaluation report 2011, p. 18:
http://ec.europa.eu/cip/files/cip/docs/cip_ict_psp_interim_evaluation_report_2011_en.pdf.

participating in the pilot, across EU borders. There are **23 participating countries** (including three associated countries).

The **STORK** project offers an interoperable solution for electronic identity (eID) based on a distributed architecture that will pave the way **towards full integration of EU e-services**. The solution provided is intended to be robust, transparent, safe to use and scalable. The **pilot is being tested and implemented through a consortium of 32 members from national governments, academia and research, non-profit and private organisations**.

Europeana has moved from a prototype to an operational service. Europeana is the online access point to Europe's cultural heritage with an EU-wide network of contributing institutions. From a prototype launched in 2008, it has grown over just three years to become a flagship of the digital agenda and a reference point for similar initiatives elsewhere (e.g. digital library of America). **Almost 2000 institutions are involved, making available 20 million objects** from e.g. National Archives, film archives, TV broadcasters and local cultural institutions. In 2011 it had more than 3 million visits. The ultimate aim is to make any digitised cultural content available through Europeana by 2020, and to stimulate the development of creative services through it.

Promoting innovative ICT based services

Stakeholders from across the value chain have been engaged in **piloting innovative services in areas of public interest**. Portfolios of pilot projects have been built to validate, demonstrate and develop experience, and collect user-based evidence, showing the benefit of innovative ICT-based services in areas such as services for the ageing population and inclusion, energy efficiency and collaborative transport systems.

These portfolios aim to scale up experience gained in innovative services from small scale implementation in front-runner countries and regions, to **large experimentations where solutions have been tested in real life scenarios** on a significant scale, addressing a range of issues including organisational, legal aspects, security and training needs. This helps to build consensus on common approaches, methodologies, standards for ICT-based services across the EU and facilitate further replication and broader deployment across Europe.

ICT for Ageing well

The changing demographic towards an ageing population brings with it far-reaching changes in our society. ICT can help elderly individuals to improve their quality of life, stay healthier, live independently for longer, and counteract reduced capabilities which are more prevalent with age. ICT can enable them to remain active at work or in their community. 13 pilots have been launched involving more than **40 regional pilot sites and 15 000 to 20 000 end users**. They cover topics such as independent living of elderly with multiple chronic diseases, cognitive impairment, integrated care, and fall prevention and detection.

Beyond the experience gained in each pilot, the portfolio help in: raising awareness and sharing good practice; building consensus via stakeholder cooperation; promoting policies to stimulate innovation in the public sector and overcome technical and regulatory barriers to market development; accelerating take-up and boosting innovation.

4. INTELLIGENT ENERGY-EUROPE PROGRAMME (IEE)

4.1. Introduction

The European Union has committed to the '20-20-20' objectives: reducing greenhouse gas emissions by 20%, increasing the share of renewables in energy consumption to 20% and improving energy efficiency by 20%, all by 2020. To put this into effect, the EU has proposed a comprehensive set of legislation and initiatives, in particular the **Intelligent Energy — Europe II Programme (IEE II)** which contributes to achieve these objectives by providing actions:

- to foster energy efficiency and the rational use of energy resources;
- to promote new and renewable energy sources and support energy diversification;
- to promote energy efficiency and the use of new and renewable energy sources in transport.

IEE II is the only EU funding instrument exclusively dedicated to sustainable energy. The total budget from 2007 to 2013 is about EUR 730 million, mostly disbursed in the form of grants and tenders to intelligent energy stakeholders, i.e. public and private organisations across Europe committed to collaborating towards a cleaner, more competitive and more secure energy future. More than 40% of these organisations have been SMEs.

A wide range of technologies and methods exist to improve energy performance, supply renewable energy sources and reduce emissions. However, market conditions prevent them from reaching their full potential. The IEE II programme forms the link from R&D to mass deployment, by means of activities aimed at accelerating the market uptake of energy innovations.

The IEE II programme has supported actions which have obvious EU added-value, and which aim to develop, apply, share and replicate sustainable energy solutions with a high leverage factor in EU sustainable energy markets across disciplines and levels of governance. The priorities for such solutions have been to change behaviours, leverage investment and accelerate progress towards the 2020 energy targets, by implementing actions which:

- create favourable market conditions;
- shape policy development and implementation;
- prepare the ground for investments;
- build capacity and skills;
- inform stakeholders and foster commitment.

4.2. Main achievements

The final evaluation of the IEE II programme,²³ published in June 2011, found that the programme was **relevant and useful**, that it replied to the evolving needs, problems and barriers related to sustainable energy issues in Europe, and that overall its actions were of good quality. It concluded that the programme was a useful instrument that **should be continued**.

Up to now IEE II supported more than 300 projects, representing nearly 310 million EUR. The interest in IEE II is very high and the programme is continuously oversubscribed, with less than one out of five projects funded each year.

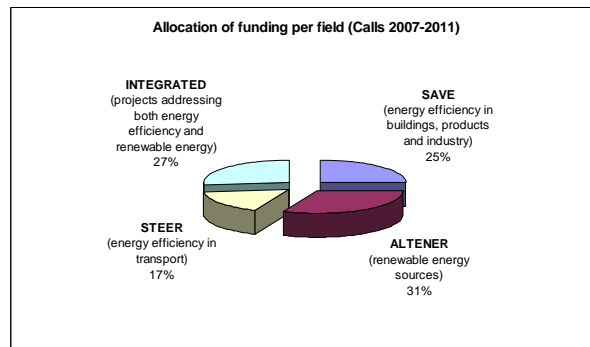


Figure: Allocation of funding in IEE II (over 2007-2011)²⁴

Overall, public bodies represent 38% of the IEE beneficiaries and over two-thirds are private entities including important European, national and regional multipliers and intermediaries as well as businesses. On average over 45% of all beneficiaries are SMEs.

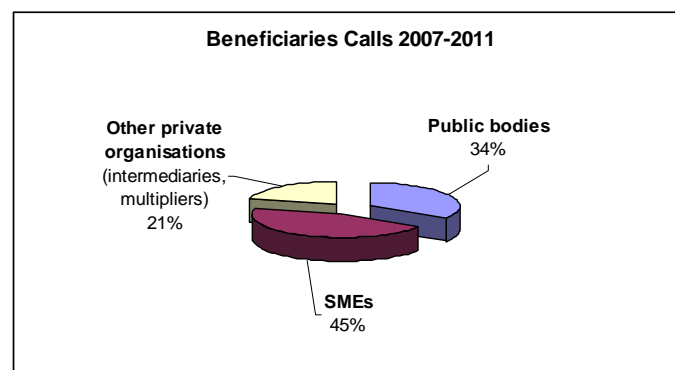


Figure: Beneficiaries in IEE II (over 2007-2011)²⁵

²³ IEE final evaluation: http://ec.europa.eu/cip/files/docs/2011_iee2_programme_en.pdf.

²⁴ Call 2011 data is preliminary as negotiations are not yet concluded

²⁵ Call 2011 data is preliminary as negotiations are not yet concluded

Starting in 2008, first project results are becoming available since 2010. Some of the main achievements and concrete results of the programme at this half-way point in the programme are set out below.

Creating favourable market conditions

The **creation of more favourable market conditions** by helping to remove market barriers and introduce and further develop new market tools. For example in the building sector, which represents about 40% of EU energy use and creates work for a large number of SMEs, 34 projects have received support. About a fourth of these have improved market conditions by delivering outputs that range from direct support to market associations to market penetration of passive house technologies. Several other projects have assisted in the implementation of the Directive on the energy performance of buildings (EPBD). Informing stakeholders, voluntary commitment schemes and energy management have formed the basis of another set of actions. About a fifth of all the building projects have had a clear focus on promoting ‘nearly zero energy buildings’. These recently selected projects illustrate the trend to address energy efficiency and renewable energies jointly.

*The **POWER HOUSE EUROPE project**²⁶ capitalised on the results of 20 previous IEE projects addressing renovation of social housing (financed in the period 2003-2006), via creation of six national platforms, online toolkits incorporating guidance, and targeted dissemination to the 39 000 CECODHAS-affiliated social housing operators. It has given impetus to public, cooperative and social housing operators which provide 12% of Europe’s housing stock, strengthening their capacity for providing housing fit for the 21st century. In the CIP final evaluation, a specific assessment of **POWER HOUSE EUROPE** was conducted which concluded that this project ‘represents an important model for promoting the adoption of best practice with lessons that go well beyond its immediate application’.*

Building capacity and skills

The programme has also **facilitated the launch of large-scale education and training schemes/activities** in the Member States to prepare the market for implementation of the EPBD and the Renewable Energy Sources (RES) Directive. These projects are leading to the development of modern day curricula, particularly in establishments of higher education, which have been adapted to meet the market need for skilled building professionals.

*To address the specific requirements of the on-site construction work force, a new **BUILD UP Skills initiative** was launched in 2011 following its announcement in the new Energy Efficiency Plan. The response exceeded expectations with 21 countries (and as many projects) committing to developing a national roadmap for the qualification and training of their construction craftsmen within 18 months.*

*The **QUALICERT project** developed common success criteria for certification (or equivalent qualification) schemes for installers of biomass stoves and boilers, shallow geothermal energy systems, heat pumps, photovoltaic and solar thermal systems, with a view to achieving mutual recognition across the EU, in line with Article 14 of the Renewable Energy Sources (RES) Directive. The project has stimulated businesses and strengthened local entrepreneurship (notably in SMEs), through training and qualifying*

²⁶ POWER HOUSE EUROPE (IEE/07/779) — ‘The big green housing and energy exchange’, www.powerhouseeurope.eu/.

installers across the EU. It has also helped to ensure higher quality installations and eventually a more reliable and transparent market.

Also other actions have been undertaken to increase skills. Among energy consumers, young generations represent an important segment which has been targeted since 2007 through 13 actions on **intelligent energy education**. The aim of these actions was to provide new and innovative teaching concepts, launch awareness campaigns at schools and build competence among students and teachers for sustainable energy solutions. These projects have been mainly targeted at primary, secondary and vocational schools. Some of them had a massive outreach, e.g. the ‘My Friend Boo’ cartoon has been distributed in **19 countries in 18 languages and reached 25 million homes** via 10 leading broadcasters.

Shaping policies & converting priorities into action

Through the programme, **EU level priorities** in the field of sustainable energy have been **shaped and converted into concrete actions**, and **studies** financed by the IEE II programme help to develop, promote and implement EU policy on energy efficiency and renewable energy sources. Over the programme period, over 60 tenders received support, mainly serving as an input to the policy and legislative work in the field. As an example, the financing of **preparatory studies** and **impact assessments** have been indispensable in developing a total of 19 Ecodesign, Energy Labelling and Tyre Labelling implementing measures. **Three IEE Concerted Actions** have made it possible for the national implementing bodies in the Member states to meet regularly and share experiences with the transposition of the EU Directives on energy performance of buildings, renewable energy and energy services.

Furthermore, 21 projects have focused on a range of equipment and target groups selected for their large energy-saving potential. The intention of the projects was to directly support the Eco-design Directive and the Energy Labelling Directive, notably by **making market surveillance activities more effective**. From 2010, additional projects have been selected to focus on household’s behaviour, addressing specific segments such as vulnerable consumers.

The energy services industry has been promoted through 12 specific projects. They have succeeded in moving the market forward by transferring best practices, by developing model contracts, procurement guidelines and measurement protocols, by raising confidence, by supporting the development of new business models and pilot projects, by analysing the market barriers and opportunities and by providing direct training and capacity building. The results of these projects were used in the impact assessment of the new Energy Efficiency Directive proposal which was adopted by the European Commission in June 2011.

The Ecoheat4EU project²⁷ contributed to improve the legislative environment for district heating and cooling (DHC) across Europe. The project surveyed and analysed support legislation for DHC and produced 14 national DHC roadmaps. Additionally a ‘DH Barometer’ was set-up in order to measure and monitor the development of DH on national markets so that the success of support measures can be assessed. The project results were widely disseminated at EU and national level at a time when the proposed Energy Efficiency directive put a special emphasis on the important role of district heating and cooling.

²⁷ Ecoheat4EU ‘Ecoheat4EU’, <http://ecoheat4.eu>.

Bioenergy currently provides more than 2/3 of the renewable energy in the EU, and is expected to account for more than half of the EU's renewable energy in 2020, which corresponds to about 11 % of the total EU energy consumption. 36 projects in this sector have received support to **develop supply chains** for solid biomass, liquid biofuels and biogas, together with European, national and regional strategies for sustainable exploitation of bioresources, including forestry, agricultural, industrial and municipal wastes.

Both agricultural biogas and waste treatment are addressed by the Bio-methane Regions²⁸ project which started in 2011. Based on the successful predecessor project 'Biogas Regions',²⁹ which mobilised more than 40 million EUR of investment in new biogas plants in 7 regions, resulting in savings of 60.000 tons CO₂eq/year, Bio-Methane Regions will accompany 20 new biogas and biomethane projects, from the initial concept to the realisation of the infrastructure. The quantifiable impact is expected to be more than 50 million € investment mobilised and more than 25.000 toe/year biogas produced.

Renewable electricity (RES-e) was the first renewable energy market sector to benefit from a Directive (2001), and has now moved into the mainstream as a rapidly growing source of electricity.

*26 RES-e projects have received support, fourteen of which have been strategic in nature, contributing to policy implementation and addressing the challenging obligations of the 2009 renewable energy Directive. Amongst these projects, the OFFSHOREGRID PROJECT has developed designs and proposals for a regulatory framework as inputs to the Commission's 'Communication on Energy infrastructure priorities for 2020 and beyond'. Other projects have addressed the **simplification of regulatory and administrative procedures and increasing social acceptance**, thereby helping to speed up project development and reduce project development costs.*

**Fostering
commit-
ment of
businesses**

The programme has **fostered commitment among businesses**. Industry has been targeted by 16 projects, mainly **aimed at Small and Medium-size Enterprises (SMEs)**. Some of them have focused on developing strategic resources for specific branches e.g. the chemical industry, plastic converters and surface engineering. Others have been developing resources that are relevant across several industry sectors, e.g. training schemes for SMEs or decision-making tools to improve businesses' thermal energy demand. The involvement of industry associations has ensured a strong commitment from business leaders as well as the achievement of a critical mass or multiplier effect at industry level.

The CHANGE project³⁰ established an extensive network of energy advisors at Chambers of Commerce and Industry, empowering employees of the chambers. The role of the advisors is to complement services offered by the market, bridging the gap between business and existing information, services, and sources of specialised advice. The

²⁸ Bio-methane Regions 'Promotion of Bio-Methane and its Market Development through Local and Regional Partnerships', <http://www.bio-methaneregions.eu/>.

²⁹ Bio-methane Regions 'Promotion of Bio-Methane and its Market Development through Local and Regional Partnerships', <http://www.bio-methaneregions.eu/>.

³⁰ CHANGE 'Chambers promoting intelligent energy for SMEs', www.eurochambres.eu/change.

advisors first received training about energy efficiency issues and then actively promoted the information among SMEs. The project was coordinated by Eurochambres, the European Association of Chambers of Commerce, and had partners in 12 EU countries. Most of the national partners coordinated a network of regional offices. A total of 276 energy advisors were trained. Finally, concrete measures were either introduced or improved to assist SMEs in optimising their energy use.

The CARE+ project³¹ developed a tool to enable SMEs in the chemical sector to carry out energy audits. Supported by a detailed user manual, the tool allows SMEs to identify energy-saving measures and calculate the return on investment. The tool was extensively tested in an audit campaign that identified considerable energy savings in the 77 SMEs involved. For instance, the 19 energy audits carried out in Bulgaria alone identified energy saving measures amounting to more than 1717 toe/year (or more than 787000 EUR/year). Meanwhile CARE+ has become part of the Responsible Care Initiative, the global initiative to improve health, safety and environmental performances in the chemical industry.

Informing stakeholders

The programme has been instrumental in **raising awareness on sustainable energy and energy efficiency**. For instance, 43 projects were aimed at making transport more energy efficient, covering both passenger and freight, and supporting more than 320 local and regional stakeholders in 28 countries.³² Some of these projects have increased the number of cycled kilometres, for a total estimated **energy saving of 20000 toe/year**. Others have focused on the promotion of public transport or car-sharing, **reaching more than a million citizens through their campaigns**.

The EU Sustainable Energy Week (EUSEW), which forms part of the Sustainable Energy Europe Campaign, has stimulated investment in sustainable energy technologies, showcased best practices and project examples, and brought together stakeholders in public events, conferences and debates. At the Sustainable Energy Europe Awards Ceremony, winners are chosen from hundreds of projects submitted by public authorities, private companies, European associations, universities and NGOs committed to the promotion of energy efficiency, renewable energy, energy education and clean transport. Recent weeks featured more than 200 events in Brussels and more than 800 energy days across the EU, and attracted over 200000 participants.

Preparing the ground for investments

The programme has been instrumental in **mobilising investments** in a wide range of sectors. The **ELENA technical assistance facility**, launched in December 2009, has till date supported 16 projects with EUR 28 million, likely to trigger energy efficiency and renewable energy investments of around EUR 1,56 billion, on the regional and local level. The pipeline of further 32 new projects could lead to mobilising of EUR 2,7 billion of investments. If the objectives foreseen by the 16 projects supported are fully achieved, the cumulated energy savings are estimated at 1092 GWh/y and 597 GWh/y of energy generated by renewable sources. The projects are expected to avoid the production of around 570 000 tons of CO₂ emissions over the ELENA project time. The number of direct and indirect jobs created during the implementation and life time of the

³¹ CARE+ Project 'Training chemical SMEs in responsible use of energy', www.cefic.org/Responsible-Care.

³² The results of these transport projects have been widely disseminated through ELTIS, the European Commission's on-line portal on urban mobility.

investment projects if the initial objectives are fully achieved can be estimated at about 3,650 full time equivalent (FTE), with 2,400 FTE for the investments to be prepared by the 2009 projects and 1,250 FTE for the 2010 projects.

Complementing the ELENA facility, an integrated initiative ‘Mobilising Local Energy Investments’ (MLEI) was introduced in 2011. It aims to support project development assistance for local or regional public authorities (either individual authorities or groupings of authorities) to work together with financial institutions and/or fund managers and/or ESCOs **to prepare, mobilise financing for and launch investments in sustainable energy projects**. The first Call attracted 25 proposals from seven countries, for a total investment of 0.8 billion EUR. The average size of the requested investments was 32 million EUR and the average size of the proposed project development assistance was 1.4 million EUR.

*The ELENA Facility provides grant support of EUR 1.3 million to the **City of Paris**, for the development and launch of a large-scale Energy Performance Contracting investment scheme targeting some 300 school buildings. The city of Paris aims to launch an overall investment programme of EUR 180 million, financed by the third party, an Energy Service Company (ESCO). This project should lead to significant cost and energy savings (10, 86 GWh/year), without a need for public finance, the investment being repaid by reduced energy bills.*

So far, the project has resulted in implementing the first tranche of investments: internal procedures and preparation of the tender dossier; call for tenders and selection of best bidder; contract signature and formal adoption by the city council; contract with external consultant for the follow-up of the works. Furthermore, an energy performance contract has been signed carrying out work in the first 100 Parisian schools. The contract stipulates a minimum of 30% energy savings and a bonus/malus system for the achievement of this objective. The contractual amount so far has been EUR 28 million.

The **ManagEnergy initiative** has also been instrumental in converting EU energy policy into action. It provides information on EU sustainable energy policies and their implementation for local and regional public authorities and energy agencies. It now consists of a website (www.managenergy.net) and capacity building events. Furthermore, **79 new local and regional energy agencies** have been established since the beginning of the IEE programme, of which 21 have been established during the IEE-II programme.

Energy policies are affecting the investment decisions made by citizens, businesses and public authorities at local and regional levels. The **local energy leadership** projects aim to ensure coherence of energy policies up and down the governance chain, from EU level to local and regional authority levels. In total 29 projects have been supported **involving more than 1000 cities and regions across the EU**, with a view to helping public authorities to draw up Sustainable Energy Action Plans (SEAPs), and to implement concrete measures and investments identified in those plans.

The projects have contributed to and built on the success of the **Covenant of Mayors (CoM) initiative**, bringing together committed European mayors in a sustainable network to exchange and apply good practices for improving energy efficiency and increasing the use of renewable energy in the urban environment. So far, more than 3 500 cities have joined the initiative and the Commission services have received more than 1000 Sustainable Energy Action Plans from the signatories.

The sample of 525 SEAPs analysed so far represents:

- 49 249 256 inhabitants (34 % of CoM population) and 289 502 317 tons CO₂ (5.87 tons/capita)*
- a commitment to reduce the CO₂ emissions by 86 million tons/year (29.8% overall reduction)*
- out of the 525 SEAPs, 441 SEAPs have information on planned cost/investment, for a total of 33.6 billion €*
- These 525 SEAPs contain 15134 measures, 11187 of which have quantified CO₂ reduction estimation, for an estimated total reduction of 43.3 million tons CO₂ (or CO₂ eq) per annum in 2020. The estimated energy saving is 73 million MWh per annum in 2020. Some measures also concern local energy generation, with a planned amount of 23.7 million MWh per annum in 2020 (renewable energy, CHP, district heating).*

5. CONCLUSIONS

The data contained in this report confirm that the CIP is on track to achieve the anticipated impact.

The CIP final evaluation³³ concludes that the CIP as a whole has become a major vehicle for promoting innovation, thereby contributing to the competitiveness of the European economy. The current economic crisis highlights the fact that the principal objectives are as significant as ever, which increases the need to build on insights that have been shown to be successful and effective, such as the financial instruments.

Some of the main achievements within the **Entrepreneurship and Innovation Programme** are set out below:

Between 2007 and 2011, the **Financial Instruments** have:

- assisted more than 155 000 companies;
- provided underlying debt financing of 11.4 billion EUR under guarantees and with investment volumes of up to 2.2 billion EUR under venture capital;
- created or maintained more than 186 000 jobs.

The **Enterprise Europe Network** has:

- been in contact with more than 2 million SMEs each year. More than half of the SMEs which used its services confirmed that they had accessed new markets or developed new products.
- helped businesses find business partners. On average, the impact on turnover of these partnerships was 220 000 EUR per company. The total impact on sales growth is estimated at 450 million EUR. Between 2008 and 2010, 2 400 jobs were created by firms under partnership agreements.

Intellectual Property Rights (IPRs) support was delivered through projects such as IpeuropAware.

- During its three years of operation, the IpeuropAware project organised 39 seminars on IPR enforcement and awareness-raising seminars and tested 72 new IP services and tools, which were then implemented by the national IP offices;
- It was responsible for training some 250 IP officials on enforcement issues, advised more than 4 000 universities, public research organisations and SMEs were advised and created a pan-European website to which nearly all the European National IP Offices contribute.

Framework conditions for businesses were improved through the exchange of best practice for example by:

³³ http://ec.europa.eu/cip/files/cip/cip_final_evaluation_final_report_en.pdf.

- simplifying the administrative procedures linked to starting up a small business: The average time and cost of starting up a private limited company in 2010 was 7 days and 399 EUR, compared to 12 days and 485 EUR in 2007.

Promoting **all forms of innovation** by, for example,:

- financing 134 projects demonstrating eco-innovation solutions. Approximately 65 % of participants in these calls were SMEs. The projects also have a significant leverage effect, as participants are required to provide 50 % of the co-funding.

Policy-development was supported through analysis and benchmarking, policy monitoring, workshops and exchanges of best practices by means of, for example:

- the European Innovation Scoreboard, EU SME annual reports and the SBA country factsheets.

The program has **boosted entrepreneurship**, and in particular female entrepreneurship by:

- supporting nine Europe-wide projects in the field of entrepreneurship education, which will serve as models for introducing innovative methods of entrepreneurship education in all the Member States. In total, the nine projects have involved about 70 000 students and young people and some 900 teachers.
- campaigning through the European Network of Female Entrepreneurship Ambassadors in 22 Member States to inspire women to set up businesses. 210 new women-led companies were created in the first year alone.

Some of the main achievements within the **Information and Communication Technology Policy Support Programme (ICT PSP)** are set out below:

The programme has **improved interaction and cooperation** between public administrations, citizens and businesses, through large scale pilot projects by:

- initiating coordinated efforts for government interaction and cooperation, e.g. for common eID (STORK), common tools and processes for electronic procurement (PEPPOL), creating a common structure and portal for access to cultural content (Europeana), justice communication via Online data exchange (e-CODEX), points of single contact for businesses (SPOCS).

Furthermore, the programme has **promoted innovative ICT-based services** through pilot projects that are built to validate, demonstrate, develop experiences and collect users based evidences showing the benefit of such services in areas such services for:

- the ageing population and inclusion, e.g. through common platforms (Commonwell, SOCIABLE), test-beds for aging well services, and creation of coordinating efforts such as the Active and Healthy Ageing European Innovation Partnership (AHAP);
- energy efficiency, through pilots such as eHouses; pilots for more energy efficient social housing (ESESH); and more efficient use of street lights (LITES);
- collaborative transport systems, through e.g. eCall, an automated crash detection system that will move to deployment phase within two or three years, pilots on

efficient urban freight (FREILOT) and efficient general travel management for European cities (IN-TIME).

Some of the main achievements within the **Intelligent Energy — Europe II Programme (IEE II)** are listed below:

The programme has **created favourable market conditions** by helping to remove market barriers and introduce and further develop new market tools:

- For example, in response to the 2006 and 2011 EU Energy Efficiency Plans, actions have led to the wider use of market-based instruments to further incentivise the use of efficient technologies. These actions have been complemented by projects aimed at sharing experience of innovative instruments to save energy in the building, transport and industry sectors, and facilitating the use of energy performance contracting to accelerate growth in the market for energy services.

EU priorities on sustainable energy have been **converted into concrete actions** to facilitate policy definition and implementation.

- The EU Directives on renewable energy, co-generation, energy services, eco-design, labelling and the energy performance of buildings have all been supported by studies, and exchanges of practices on implementation issues have been facilitated.

The programme has been instrumental in **preparing the ground for investment** by bridging the gap between potential buyers/owners and the financing community, in order to leverage public and private sources of funding for the upgrading of energy systems in the building, industry and transport sectors. For example:

- measures have been taken to help empower purchasing authorities, which are responsible for the procurement of sustainable energy systems and services, e.g. through project development assistance under the ELENA initiative (and more recently under the Mobilising Local Energy Investment initiative, MLEI).
- actions are helping to build investor confidence, e.g. by establishing long-term innovative financing mechanisms that will accelerate the commercialisation and diffusion of energy innovations across the single market.

The programme supports the **building up of capacity, knowledge and skills** to ensure that high quality energy technologies and services can be delivered.

- It has supported activities to train designers, suppliers, and installers of new energy technologies and services, especially in building SMEs, but also in industry, the services, and the public sector which authorises and licenses the use of new technologies and services at local or regional levels.

Furthermore, the programme has **informed stakeholders and fostered commitment** namely on concrete ways to reduce the impact of energy use on the environment, economy and society.

- New ways of engaging the diverse range of energy consumers have been developed by applying the results of behavioural and social sciences, adopting a cross-disciplinary approach, and exploiting the potential of new enabling technologies. Savings have

been made by networking, sharing high quality information and demonstrating commitment across national borders.

- In addition, innovative actions leading to wider public acceptance have played an important role, e.g. mobilising additional renewable energy capacity and reinforcing or extending the grid infrastructures which are needed to deliver the EU 2020 targets.

General conclusions

Since the beginning of the CIP programme in 2007, the financial and economic crises, followed by the sovereign debt crisis, have made the programme's objectives even more relevant.

In accordance with the EU response to the crisis set out in the European Council conclusions, and in particular with the need to frontload growth-enhancing measures, the programme will continue to support competitiveness and encourage sustainable innovation in the European economy.

Building on the lessons learnt from the CIP, the Commission has proposed a new generation of EU programmes covering the next Multiannual Financial Framework (2014-2020), and underpinning the Europe 2020 objectives and targets in the areas of competitiveness, SMEs and innovation.