## 2 0 0 5 A N N U A L R E P O R T







Copper Connects Life<sup>TM</sup>





EUROPEAN COPPER INSTITUTE

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#### The ECI Mission:

The European Copper Institute is a joint venture between the world's mining companies (represented by the International Copper Association, Ltd.) and the European copper industry. Its mission is to promote copper's benefits to modern society across Europe through its Brussels office and a network of eleven Copper Development Associations.

## Chairman's Message



In common with many commodities, 2005 was a year of dramatically rising market prices, largely fuelled by strong demand growth in China and other parts of Asia. Compared to the

London Metal Exchange copper price of 2,869 \$/T in 2004, the price was up 28% to 3,684 \$/T in 2005. Despite this increase, preliminary data from the International Copper Study Group shows that the 2005 global demand for refined copper remained at around 16.7 million tonne, the same as in the record year of 2004.

Within the European region, refined copper demand fell by 5% to 4.7 million tonne, with the continued domestic growth in Russia, Turkey and the EU candidate countries, up 10% to 1 million tonne, only partly compensating for the 8% fall, to 3.7 million tonne, in the 25 Member States of the European Union. The European region, however, still accounts for 29% of global demand, down 1% versus last year.

While, in the short term, these demand figures demonstrate the value and benefits that copper products contribute to economic development, along with higher and more convenient living standards, in the medium term, both the absolute level and, equally importantly, the volatility of the copper price raise the issues of the profitability of the downstream value chain and increase the drivers for inter-material substitution.

From a global mining and refining industry perspective, several companies fell short of their production targets during 2005. Industrial action, earthquakes, equipment problems and civil unrest all caused disruptions and increased pressure on the supply chain and stock levels. Even so, 2005 mine output increased by over 3% and refined output by

over 5% and both are forecast to expand by close to 7% in 2006.

Within the semi-fabricating and wire and cable sectors, higher metal prices, along with spiralling energy costs, in part linked to unintended consequences of the EU's Emission's Trading Scheme, plus the continued de-localisation, to East Europe and Asia, of part of the customer base, have required firm action to address very low levels of profitability. Steps have included product redesign to reduce weight, along with further company downsizings and consolidations.

During 2005, the European Copper Institute has continued to execute a portfolio of projects aimed at communicating the benefits that copper products bring to European society. As an example, concerns over high energy prices and fossil fuel supply security have further strengthened EU policies on energy efficiency and renewables. At a joint industry meeting with the European Commission and Parliament, ECI emphasised how copper's outstanding electrical conductivity, along with its durability, still make copper the material of choice for improving electrical energy efficiency.

I would like to thank the International Copper Association, the European copper industry and our many project partners, including the European Commission, for their funding and support and, on behalf of the membership, to thank the ECI and European CDA team for their many achievements on our behalf throughout 2005.

John P. Crofts Marketing Director, Base Metals - BHP Billiton

## Chief Executive's Message



ECI successfully managed a challenging portfolio of activities during 2005.

Top of the list was undoubtedly the submission to the European Commission and the Member States of the

first draft of the industry's voluntary risk assessment for copper. The conclusions pave the way for confirmation that the production and use of copper products is generally safe both for Europe's environment and for the health of its citizens.

Copper's intrinsic characteristics - its role in protecting people's health, its outstanding electrical and heat conductivity, the ease with which it can be alloyed and shaped, and its durability - probably give it the broadest range of industrial and consumer applications of any metal. As such, it comes under the spotlight in many European policy initiatives.

A key ECI function is to monitor these initiatives and provide industry input into the legislative agenda. Recommendations were made on a broad range of issues, including the workability of the REACH chemicals directive; the use of up-to-date science in setting environmental quality standards for water and soil; regulations for products which come into contact with drinking water and various aspects of energy efficiency.

In response to the increasing market demand for environmental information about copper products, particularly in the building and automotive industries, the German Copper Development Association developed and published authoritative life-cycle data for copper sheet, tube and wire. These data, prepared using leading-edge software and methodologies, have been peer reviewed to globally recognised ISO standards.

Education and raising awareness of copper's excellent properties remain at the core of ECI's activities. Through its offices in Poland and Hungary, information was provided on electrical energy efficiency issues to policy-makers, specifiers and engineers in the newer Member States. This activity will be extended in 2006 to cover other countries in the region, as well as targeting new audiences with messages about copper's health and durability benefits in drinking water and heating systems.

Increasing public awareness is also important in supporting ECI's market development programmes. ECI has been successful in working closely with the media to highlight how policy goals, such as sustainable development, can be met using copper applications. To give just one example, visits to a metal recycling facility and tube factory in Spain led to media reports on national television and radio, as well as in the print media, about the important role which copper plays in conserving the world's natural resources due to its ability to be recycled 100% at the end of its useful life.

During 2005, ECI was pleased to welcome Viega GmbH as a new member. Viega is one the world's leading suppliers of copper and alloy components for water distribution and heating systems. We were also pleased to welcome more than 20 new industrial and academic project partners into our national Electricity and Energy programmes.

On behalf of the European network, I would like to extend my sincere thanks to our members and project partners for their continued financial and human support.

Ju Sundy John Schonenberger



## Key Activities & Achievements

During 2005, ECI completed work on the industry's voluntary risk assessment for copper and four copper chemicals, the culmination of a process initiated back in 2000. The official review country, Italy, presented the dossier to the European Commission and other EU Member States on May 15. The review and approvals procedure is expected to be completed around the end of 2006.

Through its links with Eurometaux, ECI actively represented the copper industry's interests during the European Parliament's first reading on the Commission's proposal for improved chemicals management (REACH). ECI also outlined advocacy strategies which could be pursued by the national authorities of copper mining companies based outside Europe.

In recognition of the opportunities offered by higher economic growth rates in eastern Europe, ECI launched new programmes to promote the benefits of copper products both in increasing electrical energy efficiency and in providing healthy and long-lasting piping and fittings for drinking water and heating installations. Target countries include Bulgaria, Hungary, Poland, Romania, Russia, Turkey and the Ukraine. The EU is supporting ECI's energy efficiency drive with funding from its Intelligent Energy Europe programme.

ECI launched an education and awareness campaign under the umbrella brand 'Leonardo ENERGY'. Supported by more than 100

partners from industry, engineering consultants and academia, Leonardo ENERGY is using innovative web-based tools to deliver a broad range of educational messages to professional designers, specifiers and engineers on issues such as electrical energy efficiency, electrical safety and power quality.

The ECI led Forum for Electrical Domestic Safety in Europe (FEEDS) continued its high-profile information campaigns through the national Consumer Associations in France and in Spain, supported by ECI Communications function. The goal was to encourage mandatory regular inspections of homes, leading to substantially higher standards of occupier safety and convenience. The French authorities have included such a requirement in a new law which will come into force during 2007.

ECI's communications programme has been successful in generating significant mainstream media coverage in ten EU countries, primarily through the organisation of media events and press conferences. News items highlighting the benefits of copper products in architecture and modern design, along with human health, recycling and electrical safety, have been broadcast on national television and radio, and extensively covered in the print media.





## Market Trends & Developments

Nearly two thirds of copper demand goes into the generation, distribution and usage of electricity, and is consequently linked closely to capital investment in infrastructure, manufacturing capacity, commercial buildings and residential housing. As a result, growth rates are expected to be higher in east European countries in the medium term.

EU policy requires 21% of European electricity supply to be sourced from renewables by 2010. Copper usage per megawatt, in efficient wind turbines and the associated grid infrastructure, is ten times higher than that required in a conventional power station.

The solar industry is actively promoting the growth of solar thermal installations, with the target of increasing the installed surface area of solar panels from 15 to 100 million m2 by 2010. While the copper tonnage in the collector unit itself is small, domestic systems require efficient heat exchange capabilities - an area in which copper excels - plus the associated piping and storage tanks.

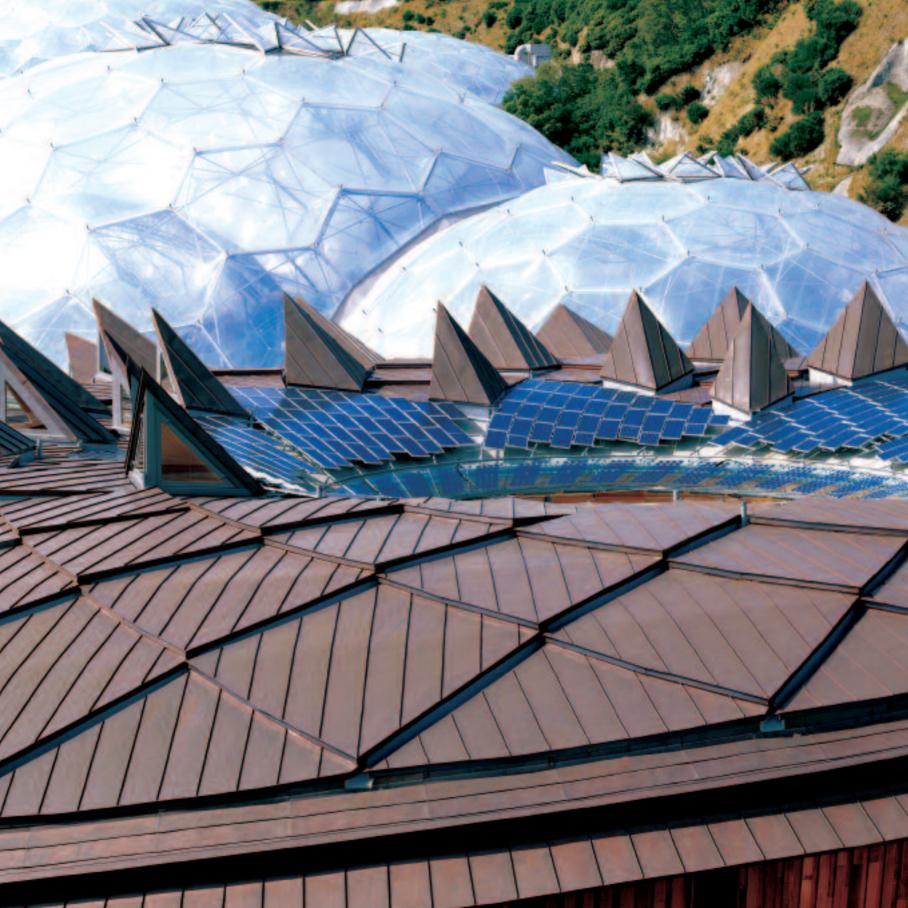
Technological advances in cable construction and installation have fuelled a growing trend towards underground high-voltage cabling, which favours copper. Demand will be driven by the renovation of urban areas (where laying cables under ground is preferred on aesthetic grounds and to ensure reliability of supply), the expansion of offshore wind farms and increased efforts to link national grids to allow for full liberalisation of the European electricity market.

Improving the reliability and quality of electricity supply to industry, and upgrading the safety and convenience of residential installations, will support growth in wire and cable, and associated system components. The desire of elderly people to live in their own homes for longer, instead of moving into residential care, will expand the market for power-activated systems such as doors and stair lifts, alarm systems and remote medical monitoring. Conservative estimates suggest that the necessary upgrades could lead to the doubling of the intensity of copper use across the housing sector.

Opportunities to exploit copper's naturally occurring anti-microbial properties to limit the growth of pathogens, such as MRSA (Methicillin-resistant *Staphylococcus aureus*), on surfaces and equipment in healthcare facilities are being evaluated. Recent scientific publications have demonstrated the vastly superior performance of copper, versus other materials such as stainless steel, and *in situ* trials are underway at sites around the world.

Reductions in harmful emissions from diesel engines, to comply with strict new regulations in Europe, North America and Japan, require significant changes in cooling systems. The cooling demands of so-called exhaust gas recirculation systems exceed the fatigue performance of current materials. Copper's superior high-temperature performance, exploited through the use of new CuproBraze technology, has reinforced its position in the truck radiator sector and could lead to a resurgence in its use in passenger cars.





## Automotive, Building Construction & Alloys

Nigel Cotton, Manager



#### **Automotive**

The overall number of cars produced in Europe in 2005 was similar to the figure for the previous year. However, the copper content of vehicles rose slightly as a

result of the increased electrification of car components in order to achieve higher levels of comfort, fuel efficiency and mobility.

European regulations on emissions continue to boost interest in ICA's CuproBraze technology, with strong member support following up on machine design and factory footprint information. New opportunities for growth include charge air coolers and additional smaller heat exchangers. ECI published awareness-raising articles in the trade press and participated in meetings with key players in the automotive market.

#### **Building Construction**

During 2005, the Building Construction programme introduced numerous new marketing activities into the European Copper Plumbing and Copper in Architecture Campaigns. These included training seminars and technical manuals for young plumbers and architects, trade press advertising, newsletters, brochures and school kits, environmental workshops and interior design programmes.

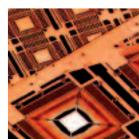
Market research was carried out to prioritise growth opportunities in eastern Europe. Following a review of current regulations, along with local fabrication capability and support, three countries were chosen for action starting early in 2006. The copper industry continued to participate fully in the European Commission's regulatory group, tasked with developing a European Acceptance Scheme for materials in contact with drinking water. ECI funded additional research to understand the potential impact of different water compositions on copper and the key alloys used in modern drinking water and heating installations.

Rising fuel costs and security of supply issues have focused the attention of academics, politicians and the public on renewable technologies. The solar thermal market grew significantly, up by 15-20% since 2004. Copper maintained its leading market share in the collector market and further growth is expected as the proposal for a renewable heating and cooling directive makes its way through the regulatory process. Two years ago, in Spain, ECI piloted a marketing, design and installation CD ROM for this sector. At the end of 2005, the CD is now widely distributed in seven languages.

#### **Alloys**

Following the publication of new science, re-confirming the naturally occurring anti-microbial properties of copper, efforts are underway to field test the ability of copper based materials to inactivate harmful pathogens on touch surfaces and hardware equipment in health care facilities.







### **Communications**



Christian de Barrin, Manager



ECI's overall communications programme continued to focus on strengthening copper's image as a key material for the future. Major efforts were made to support ECI market

development programmes by raising awareness among the public and decision-makers of the benefits of copper to modern society. During 2005, the programme undertook a wide range of activities, including corporate communications, education, media relations, e-communications, external relations and an image impact study regarding 2001/2005 PR activities.

#### ECI pan-European Media Relations Programme

Launched in 2001, ECI's pan-European media relations programme includes Belgium, France, Germany, Italy, Poland, Spain, Sweden and The Netherlands, with smaller activities in Hungary and Slovakia. In 2005, key messages focused on highlighting copper's recycling properties, its sustainable and aesthetic properties for use in architecture and interior design, its conductivity and mechanical properties to ensure electrical safety and comfort in European homes, and the important role it plays in public health.

Media events were held in Belgium and in Germany on copper in architecture; in Spain, on its contribution to electrical safety and on copper recycling; in Sweden, on copper and health; and in Italy, on copper and interior design. More than 300 journalists participated in these events, including reporters from CNN World Report, Euronews, TF1, TVE, Die Zeit, La Repubblica, Le Monde and El Mundo. A highly educational

40-minute television feature, produced with the support of member companies, was broadcast on the international channel TV5 and on the French public channel France 3.

#### **Education**

Educating young Europeans about copper's essential properties has been one of ECI's key objectives since 2001. Educational e-sources modelled on the British curriculum, have been produced on chemistry, biology, health and physics over the last four years. ECI has now compiled an interactive CD, available in English, French, Italian and Spanish, which will be used as a key tool to raise the awareness of copper's properties amongst secondary school pupils.

#### **E-communications**

Following an external audit, ECI strengthened its e-communications strategy and increased the visibility of its website. An advertising campaign was launched on Google in 13 European countries, resulting in an additional 40,000 visitors to the site. A new website for the Spanish Copper Development Association, based on the ECI model, was also launched in 2005.

#### **External Relations**

ECI continued to strengthen relations with its members, notably through the launch of an e-version of its quarterly newsletter euroCopper.news. In close cooperation with the Scandinavian Copper Development Association, ECI continued its information campaign targeted at decision-makers and opinion leaders in Sweden.



## Electricity & Energy

Hans De Keulenaer, Manager



#### Leonardo ENERGY

The main focus of 2005 was the launch of Leonardo ENERGY. This new advocacy and outreach platform integrates all of ECI's current electricity and

energy campaigns under a common umbrella brand, while also providing a single point of contact for sustainable energy professionals. In addition to providing a unified market presence, Leonardo ENERGY is a flexible platform for launching new campaigns using a common format and campaign tools.

2005 was a breakthrough year in the use of new communications technology for marketing purposes. An increasing share of Leonardo ENERGY communications is electronic, providing a highly scaleable and cost-effective approach to marketing. A new web portal allows for the organisation of web events and the provision of web training, as well as providing an efficient means to hold international project meetings. Webcasts also provide a very promising means of increasing market presence and awareness.

Leonardo ENERGY has been successful in winning two new funding grants under the EU's Intelligent Energy - Europe programme. The first, Energy Efficient Electric Motors, aims at promoting efficient motor-driven systems in Central Europe and the second, Scheme for Energy Efficient Distribution Transformers, will develop a standards and labelling scheme for high efficiency transformers and promote life-cycle costing.

#### **Eco-design toolbox**

A new eco-design toolbox for energy-using products has been developed, providing multiple benefits - a marketing tool to quantify the drivers and incentives for high efficiency products; support for the definition of implementing measures under the EU's eco-design directive; and demonstration of the clear, often 100-fold, improvements in environmental performance achieved by increasing copper's intensity of use in industrial equipment.

#### Vocational training system on Power Quality

The LPQIVES project for the European Commission was concluded. A spin-off project from the successful LPQI campaign, it has developed a vocational education system for electrical professionals. The first courses have been held, and certificates issued, in Poland and Germany.

## From residential safety to technology enhanced living

Driven by peoples' expectations, new technological possibilities and regulation, it is increasingly possible to offer services for tele-working, tele-monitoring and tele-health care in the home. In cooperation with its industry and Association partners, ECI's residential wiring campaigns support the promotion of these technologies for home entertainment, safety, security and medical services.





## **Environment & Regulatory Affairs**

Katrien Delbeke, Environmental Manager Thierry Gerschel, Regulatory Affairs Director Ilse Schoeters, Project Manager Environmental Programme



# Submission of the copper risk assessment to the European Commission

After four years of intensive cooperation between ECI, the industry and the Italian Government's Istituto

Superiore di Sanità, the first draft of the industry's voluntary risk assessment report, a 1,400 page document, was submitted to the European Commission on May 15 for official review by the EU Member States.

This comprehensive assessment paves the way for confirmation that the production and use of copper products is generally safe for Europe's environment and for the health of its citizens.

The risk assessment report is now under review by the Commission and EU Member States, with results expected around the end of 2006.

In cooperation with the national industry and/or Federations, ECI held bilateral meetings with the authorities in several Member States to discuss the dossier. Several general communications were prepared to publicise the preliminary results and discussions on how the results could be used in various promotional programmes, for example in the plumbing and architecture sectors, were held with the relevant member committees.

#### Intensive lobbying efforts continue on REACH

Throughout 2005, there were intensive debates in the European Parliament and the Council on the Commission's proposal on future chemicals management. More than 5,000 amendments were submitted for consideration.



The joint advocacy efforts of Eurometaux and ECI, towards the Parliament, focused primarily on the issue of workability. This resulted in the exemption of non-chemically modified ores, concentrates and minerals from the scope of registration (but not from authorisation); the exclusion of waste from REACH; and recognition of the need for specific guidance on alloys. On the basis of the outputs from the Parliament and the Council, the Commission will deliver a new text for a second reading later in 2006. Industry will revise its advocacy programme as necessary.

#### Other regulatory activities

The bioavailability models for copper, developed through ECI and the International Copper Association, are being increasingly applied by different regulatory authorities. The UK is using them to validate findings on the safe copper threshold in the aquatic environment and Finland has used the risk assessment database as a basis for defining their regulatory needs. During a workshop, co-sponsored by different metal commodity associations, a group of leading experts developed a range of recommendations to improve the scientific methodologies used to assess the critical loads of metals in soils.

These have been submitted to the United Nations Convention on Long Range Transboundary Air Pollution and the findings summarised in a key scientific journal.



### **Financials**

Catherine Mantell, Supervisor



During 2005, ECI and its network of 11 national Copper Development Associations, along with more than 100 project partners, operated on a budget of 16.1 million

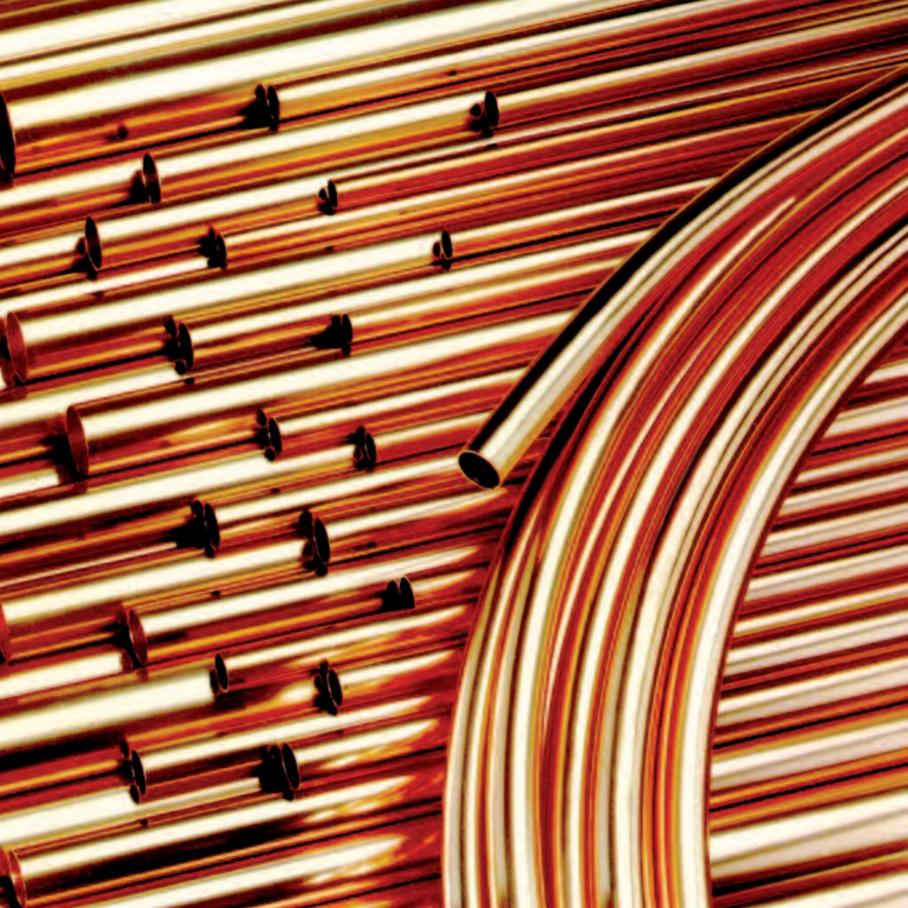
dollars - a 13% increase on the previous year. Agreement on an increase in the dues paid by the mining company members of the International Copper Association led to a 14% rise in the funds allocated to Europe. European industry members, and an increased number of project partners, particularly in the electricity and energy area, increased their co-funding contributions by 12%. Towards the end of the year, ECI and its network succeeded in getting new co-funding from the European Union under the Intelligent Energy

Europe programme. Over the next three years, these funds will increase the promotion of electrical energy efficiency improvements in countries in eastern Europe. This will compliment the existing five-year Polish programme for the promotion of energy efficient motor driven systems, which is supported by the United Nations' Global Environment Fund.

During the year, ECI updated its accounting and reporting systems to take advantage of the efficiencies and capabilities provided by the new accounting system introduced by the International Copper Association.

2005 European Promotion Funds (K\$)

Strategic Initiative	ICA Funding	<b>Local Co-Funding</b>	Total
Building Construction	3, 580	2, 600	6, 180
Electricity and Energy	2, 720	1, 730	4, 450
Industrial Applications	530	120	650
Environment and Regulatory Affairs	1, 350	590	1, 940
Communications	940	290	1, 230
Network Operations	840	840	1, 680
<b>Total Funds</b>	9, 960	6, 170	16, 130



## Copper Development Association Achievements

Benoît Dôme



## Belgium, Luxembourg, Netherlands (Copper Benelux)

In 2005, Copper Benelux prepared electronic versions of its publications and revamped its website to permit direct download by users. A leaflet on the "Struggle against Legionella" was produced for building construction decisionmakers and widely publicised through a series of extremely well-attended seminars. Copper Benelux is a key partner in the Dutch association, Elux, whose goal is to increase occupier convenience in the 'house of the future'. The installation of room outlets, each providing power, telephone/internet and TV/cable capability, will add 20-25 kg of copper in a typical house. In cooperation with the various project partners and the local authority, a field study on the run off from an architectural copper installation, which confirmed no environmental impact, was successfully completed. In its role as one of ECI's European competence centres, Copper Benelux managed the pan-European residential building wire campaigns (FEEDS and CASA FUTURA) and maintained the architecture campaign's multi-language website.

Olivier Tissot



## France - Centre d'Information du Cuivre (CICLA)

CICLA's most successful 2005 programme was an advocacy programme focusing on increasing electrical safety in French homes. After three years of intensive efforts, a general law on dwellings, which includes provisions on electrical inspection, was approved by the Senate and the National Assembly. This will be officially published in 2006 and come into force in 2007. With France now expected to offer the

greatest near term potential for solar growth in Europe, ECI's solar programme was launched, with 5,500 copies of a dedicated solar CD ROM for installers disseminated in a highly successful campaign. New brochures and fact sheets on copper tubes and architectural bronzes were also produced for the building construction sector.

## Germany - Deutsches Kupferinstitut e.V. (DKI)

The European Life Cycle Competence Centre, managed by the DKI, published the first ever life cycle data, developed by the industry, for its key products - tube, sheet and wire. Data was prepared using leading edge software and methodologies, published via a new website, and peer reviewed to the requirements of the international ISO standards. As a leading European source of technical information on copper alloys, the DKI issued updates of several alloy brochures, coordinated an industry project team in the identification of alloys to support Europe's new anti-microbial programme, and hosted a successful "Science Meets Industry" symposium, which attracted over 100 participants from across industry and academia. Results of the DKI's communications efforts led to very positive broadcasts, reaching five million viewers through two major national television stations, with its broader media relations programme reaching an audience of over ninety million people throughout the year.

Dr. Anton Klassert



#### Kostas Tsapras



## **Greece - Hellenic Copper Development Institute (HCDI)**

HCDI activities focused on promoting copper's sustainable and antimicrobial properties and highlighting its benefits for the environment and human health. The training and education of students was a priority, with 110 seminars, attended by over 2,800 students, providing up to date training in copper piping systems and other copper technologies. One-day regional events, targeted at specifiers, engineers and installers, again proved their worth as a way of demonstrating the excellence of copper for plumbing, roofing, solar and electrical applications. All attracted a very high level of interest, plus coverage on local television and in the print media. With the support of member companies, market research was carried out to analyse the current demand for copper in the Balkan countries, to get a better understanding of their growth potential, and to prioritise opportunities to promote the use of copper products.

Robert Pintér



### Hungary, Czech Republic & Slovakia Hungarian Copper Promotion Centre (HCPC)

Central Europe continued to offer strong market growth opportunities for copper products, with the HCPC actively involved in analysing opportunities in Romania and Bulgaria. Within the current geographies, HCPC implemented a broad range of market development programmes, including organising the first ever internet competition for students on copper tube. 255 Slovak and Hungarian participants from 26 schools took part. More than 320 plumbers were certified at gas courses in Hungary and highly

successful seminars were held for architects in Budapest and Bratislava, in cooperation with the suppliers of the various construction layers required in the installation of "non ventilated copper roofs". HCPC is an important partner in the European LEONARDO Power Quality Initiative, organising awareness and training seminars for engineers in Hungary and the Czech Republic. Advertising and media campaigns promoting the HCPC's activities were launched in the trade press, with the aim of making the HCPC one of the most important sources of copper information for decision-makers in the area.

#### Italy - Istituto Italiano del Rame (IIR)

2005 was another outstanding year, linking copper and design in Italy. For the third year running, the IIR organised the Abitare con il Rame (Living with Copper) exhibition, held in the famous Palazzo della Triennale, the most important design museum in Italy. Several thousand people visited the exhibition and 80 journalists from all over Europe attended the opening ceremony. Other IIR activities covered architecture, including the organisation of seven conferences attended by 1,500 architects, and solar energy, with the launch of ECI's technical CD ROM for installers. Education remained one of IIR's key priorities, with the dissemination of a multimedia educational CD on copper's properties for secondary schools. Finally, an agreement was reached with the national Junior Engineers Organisation on the implementation of

training seminars for copper and copper alloys.

Vincenzo Loconsolo



Piotr Jurasz



## Poland - Polish Copper Promotion Centre (PCPC)

During 2005, the PCPC developed two new initiatives to promote energy efficiency. The first, on Energy Efficient Electric Motor Systems cofunded by the EU, focuses on the dissemination and application of recently developed tools in the new Member States and Candidate Countries. The second was a new project, carried out in cooperation with the local heating utility and municipal authorities, to supply heat to old buildings in Wroclaw through modernised heating installations made from copper. A seminar on new technology for the Polish industry was organised, in cooperation with Outokumpu Copper, to present CuproBraze technology for high performance heat exchange applications, e.g. in commercial vehicle radiators. To support the European Architecture Campaign, a workshop for leading architects and architectural professors was organised at the Outokumpu plant in Pori, Finland.

Vadim Ionov



#### Russia - National Copper Center, Moscow

Several key legal and regulatory requirements, facilitating the use of copper in building and construction in Russia, were completed during 2005. Copper piping was included as a new recommended material in the Moscow High-Rise Building norm for both heating and water supply. Copper is also now the only electrical material allowed in electrical applications in high-rise buildings. This completes the full switch from aluminium, which, until five years ago, was used

almost exclusively. ECI's Leonardo Power Quality Application Guide, co-branded in Russia as an "Energy-Saving Topic", won an award for the Best Electrical Publication in ENERGY-SAVING magazine. Initial work to promote copper's role in solar-thermal installations generated immense interest both among potential users and in the trade media. Working closely with the PCPC, the NCC completed an analysis of future copper demand growth opportunities in the Ukraine.

#### Denmark, Finland, Norway and Sweden Scandinavian Copper Development Association (SCDA)

Through the SCDA, the Scandinavian copper industry continued to advocate against inappropriate authority restrictions on the use of copper in buildings, particularly in Sweden. Targeted discussions towards policy makers have opened the door to a better understanding of copper's importance as a sustainable building material. A project aimed at understanding and quantifying the run-off from roofs resulted in a publication which confirmed that 99% of the copper ions released are bound to organic matter in the drainage pipe materials and in the soil, thus eliminating environmental concerns. SCDA continued its media campaign aimed at raising the awareness of copper's benefits for human health by organising two media events, attended by over 40 journalists.

Mariann Sundberg



José Ramón Morales



#### Spain and Portugal Centro Español de Información del Cobre (CEDIC)

CEDIC developed a broad range of market activities in 2005, including a key programme to highlight the need for the regular inspection of homes. This led to the publication of a common action plan, drawn up in collaboration with PRIE (Platform for Renovation and Inspection for Electrical installations), at a press conference in November attended by key Spanish media. In coordination with the Spanish Ministry of Health, CEDIC sent out 10,000 DVDs to professionals in the plumbing sector reinforcing the performance benefits of copper in drinking water distribution systems. This was in response to a fraudulent mailing, sent out by persons unknown, announcing the introduction of future restrictions on the use of copper. Linked to the introduction of the EU's new Electrical & Electronic Waste Directive, a successful media tour was organised on copper recycling. CEDIC also introduced a new general website, based on the ECI model, and distributed its solar CD ROM to more than 3,000 professionals.

restrict the growth and transfer of harmful pathogens, such as MRSA (Methicillin-resistant Staphylococcus aureus). A broad stakeholders group has been set up to consider the science, regulatory and market acceptance issues. The 12th Copper in Architecture Awards were, for the first time, extended to include a new award for European design - won by the architect of a new church in Finland. The UK's Power Quality Partnership broadened the scope of its training events and introduced a new day-time seminar and exhibition. The UK Copper Board continued its strong support for education by sponsoring the Young Plumber of the Year competition, achieving a 200% increase in participation, and launching a Master Class event for the top students and their lecturers. A renewable energy market study identified opportunities for copper alloys in offshore wind and wave generation.

Angela Vessey



#### United Kingdom Copper Development Association UK (CDA UK)

CDA UK is taking the country lead in a new European project to determine the benefits of using copper alloy products in touch surfaces and hardware in health care facilities. The naturally occurring antimicrobial properties of copper could play an important role in helping to

### Access the Global Network

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