Services | Activities | Projects 2012 – 2013
of the Nuremberg Chamber of Commerce and Industry
Contents

- 1 Energy supply 4
- 2 Energy efficiency 6
- 3 Raw material supply 8
- 4 Raw material and material efficiency 10
- Contacts 12
- Publishing information 14

Our first e-car, complete with 500-km cable drum!
Energy and raw materials for tomorrow

Securing the supply of energy and raw materials is a huge challenge for German industry. According to a current survey carried out by the German Chambers of Commerce and Industry, rising energy and raw material costs are now regarded by company leaders as “the main risk facing Germany as a business location” – surpassing even labour costs.

Over half the respondents are concerned about interruptions to the power supply which could entail serious consequences, extending as far as the paralysis of entire production processes. Central Franconia is one of Germany’s electricity-importing regions. Following the resolutions that led to the current transition in energy policy, it is now important to lay the foundations to ensure that the domestic supply of electricity continues to be adequately secure and available at affordable prices.

The availability of raw materials can by no means be taken for granted any longer either. Within the short space of a year, the proportion of companies regarding their supply situation as critical has doubled to 50%. The reasons for this include both rising demand and the growing reliance on individual exporting countries.

Through its Theme of the Year 2012 “Energy and raw materials for tomorrow”, the Chamber of Commerce and Industry hopes to make its own contribution to overcoming such challenges in order to ensure that in the future our supply of energy and raw materials can continue to meet three essential criteria: to be secure, affordable and efficient.

The Nuremberg Chamber of Commerce and Industry offers a broad portfolio of services and projects aimed at generating sustainable growth stimuli for the economic region. This brochure provides an overview of our work revolving around this year’s theme of “Energy and raw materials for tomorrow”.

If you have any further questions, please visit our website or, alternatively, contact us directly.
Energy supply must be reliable, secure and affordable

By shortening the time frame for the energy transition, German policy-makers have initiated a fundamental restructuring of the energy supply system. The rapid phase-out of nuclear energy necessitates investment running into the billions in terms of both new production capacity and additional network infrastructure. In Bavaria alone, this will mean adding some 240 km to the supergrid and approx. 100,000 km to the medium and low-voltage grids, as well as creating new energy storage capacity.

With an average of just 14 minutes of blackouts per year, Germany comes out top in international comparison. In this context, it is of the utmost importance to German industry that this high level of security and reliability of electrical energy supply be maintained. Even minor fluctuations in voltage and temporary interruptions in supply can be problematic for industrial companies, whilst longer power failures can bring entire production lines to a standstill and cause serious damage.

By offering services and initiatives, we contribute to ensuring that Central Franconia’s energy supply remains secure, reliable and affordable in the future. For example, we draw up guidance for companies to help them ensure the security of the energy supply for their operations and we work to raise awareness and provide motivation at all levels of state, industry and society as a whole.
We’re working for you

- CCI framework agreement providing favourable electricity purchasing conditions for small and medium-sized enterprises
- Representation of interests regarding energy policy by the following CCI committees: “Energy | Environment” and “Industry | Research | Technology”
- Access to and further development of the network connected with Energy Campus Nuremberg
- Market transparency and provision of experts via the CCI “Electricity and Gas Pool” supplier directory
- CCI conference: “Local authorities and business – partners in energy transition” with panel discussion
- CCI specialist forums in Nuremberg: “Security of supply | Voltage quality” and “Climate change | Climatic consequences for Central Franconia”
- CCI guidelines “Security of supply” from the Bavarian Chambers of Commerce and Industry
- CCI publication “Renewable energies in trade and industry – sound solutions worth copying from the Nuremberg metropolitan area”
- CCI publication “Energy research in the Nuremberg metropolitan area”
- Panel discussion “Designing the energy transition” within the framework of the 2012 German Junior Chamber conference in Nuremberg
- Concept development for a centre for innovation and new businesses (“Energy Valley Start-up Center”) in Nuremberg
- Bavarian environment package: CCI responsible throughout Bavaria for the “Energy | Climate” working forum
- Representation of interests for the Bavarian CCI on the energy advisory committee to the Bavarian minister of economic affairs
- Active involvement in the executive committee of the competence initiative Energierregion Nürnberg e.V., the steering committee of the Nuremberg Energy Campus and the advisory committee of the Power Electronics Cluster
- Representation of interests for the Bavarian CCI in the “Forum for wind power” of the Energie innovativ department of the state energy agency
- Initiating and supporting regional collaborative projects – for example: high-speed communication system for “smart grid” automation
Increased energy efficiency reduces costs and protects the climate

Even in sectors that are less energy-intensive, energy consumption is increasingly becoming a focal issue. Rising energy prices are making investments in cost-saving measures increasingly attractive – but not at the expense of operational productivity. The objective therefore is optimal efficiency in terms of energy consumption. Every kilowatt hour saved contributes towards increased profits for the company as well as climate protection.

The CCI supports businesses in identifying energy efficiency potential. This can be done through energy coaching in the form of orientation support or subsidised energy consultations with qualified consultants. Sector and topic-specific specialist forums, information events, networks and publications keep companies up to date on recent developments. For those companies wishing to establish energy management in their operations in the long term, the CCI offers courses leading to the qualifications Energy-Manager (CCI) | European EnergyManager or Compressed Air Specialist (CCI). Experience shows that the project work required for the EnergyManager qualification can save a company on average €30,000 per annum.
We’re working for you

- Partnership for climate protection, energy efficiency and innovation between the federal government and the CCI organisation, with an information and qualification offensive
- KfW energy efficiency consultation: as a regional partner of Germany’s Reconstruction Loan Corporation (KfW), we support companies in arranging a subsidised energy efficiency consultation
- Energy efficiency coaching: on-site visits from energy coaches make it easier for businesses to get to grips with the topics of energy efficiency and climate protection
- Targeted provision of information, orientation support and initial consultations on energy topics, as well as technology and knowledge transfer from the scientific community to industry in Central Franconia
- CCI specialist forums “Saving costs and energy” focusing on “Compressed air management”, “Air-conditioning and refrigeration technology” and “Energy management systems” in companies
- CCI visiting programme “Talking business on site” on the topics of energy savings with combined heat and power generation, biomass utilisation and building automation
- 4th International Conference for European EnergyManagers
- Working forum “Climate | Energy” within the framework of the Bavarian environment package and in cooperation with the Bavarian Energy Efficiency Pact
- EnergyManager (CCI) | European EnergyManager: qualification of employees for the optimisation of energy systems in industry
- Compressed Air Specialist (CCI): advanced course designed for those responsible for compressed air applications to optimise both the cost and energy efficiency of compressed air systems used in industry
- Networks | Clusters: CCI “Energy” work group, “CCI energy user club”, Energy Manager network, virtual energy communities (eForums)
- Market transparency through the CCI’s green tech company information system www.umfis.de: a database of hardware and service suppliers in the fields of energy conservation, energy efficiency and renewable energies
- Initiation and support of regional collaborative projects – for example: minimising energy consumption through optimised planning and diagnostics for manufacturing equipment
A strategic raw materials policy safeguards supply and stabilises prices

Natural stone, sand and cement for the construction industry; steel, aluminium and titanium for the automotive or aircraft construction industries; special metals such as tantalum, lithium or neodymium for high-tech sectors – without raw materials, manufacturing simply is not possible. The value of raw materials used in Germany in 2010 amounted to approx. €138 billion, of which a total of around €110 billion was accounted for by imported raw materials. Sharply increasing and fluctuating prices for industrial metals and agricultural commodities, not to mention concerns surrounding the sufficient availability of rare earths, are causing industrial companies in particular to develop strategies aimed at securing their supply of raw materials.

We support companies in finding substitutes for critical raw materials, in closing recycling cycles and in establishing operational risk and procurement management systems for raw materials. In addition, we endeavour to ensure that those efforts made by the companies will receive support from the state (for example, through the simplified exploitation of domestic raw materials, increased basic research and the funding thereof and support in gaining free access to international raw materials markets).
We’re working for you

- 5th Russo-German Raw Materials Conference (2012) in Nuremberg: we are organising the accompanying specialist exhibition focusing on raw material supply
- CCI collaborative forum: “Canada, raw materials partner”
- CCI specialist forum: “Raw material supply | Raw material procurement”
- CCI specialist forum: “Material substitution”
- CCI specialist forum: “Secure raw material supply for IT/electronics manufacturing”
- CCI Bavaria study: “Raw material supply in Bavaria”
- CCI study: “Electromobility in the Nuremberg metropolitan region”
- CCI innovation and user club: “Electromobility”
- CCI user club: “Secondary raw materials sector”
- CCI user clubs: “New materials” and “Non-destructive material testing”
- Representation of interests through CCI committees: “Energy | Environment” and “Industry | Research | Technology”
- Initiation and support of regional collaborative projects – for example: “Development of drives and generators without the use of rare earths”
Raw material and material efficiency lowers costs and relieves demand

The material and raw material costs of manufacturing industry in Germany represent by far the largest pool of costs, with an average share of approx. 45% and an absolute value in excess of €800 billion. Despite the fact that, in international comparison, German industry operates in a particularly resource-efficient manner and that it was possible to increase raw material productivity by around 40% between 1994 and 2008, significant savings potential still exists. As well as bolstering competitiveness, the development of this potential contributes to cost reduction and planning security.

We support companies in finding process and product innovations which, on the one hand, reduce consumption of natural resources and, on the other, facilitate the utilisation of recycled products. A significant component of the Central Franconian material efficiency offensive will be the intensification of material efficiency coaching in companies.
We’re working for you

- CCI user clubs: “Material and raw material efficiency” and “Environment”
- CCI recycling exchange: an instrument for the promotion of recycling management and the protection of resources. It acts as a meeting point for the supply of and demand for reusable waste
- Scientific colloquium for business on the topic of “Coatings and wear protection”
- Central Franconian material efficiency offensive
- Compilation and distribution of targeted information for industrial practice
- Accessing of funded programmes for increased material and raw material efficiency in Central Franconian companies
- Enhancement of material efficiency through the use of automation solutions in collaboration with Northern Bavaria’s “Automation Valley” (www.automation-valley.de)
- Raw material and material efficiency coaching, initial consultations for Central Franconian companies
- Bavarian environment cluster | North Bavarian environmental competence initiative
- Provision of R&D experts for the purpose of improving the utilisation of raw materials
- CCI expert database (www.umfis.de): database containing hardware suppliers and service providers in the field of material and raw material efficiency
- CCI consultant training: Resource efficiency in Central Franconia
- Initiation and support of regional collaborative projects – for example: “Resource-friendly electronics production”
Contacts

- **Dr.-Ing. Robert Schmidt, Dipl.-Ing. (Univ.)**
  Head of Innovation & Environmental Affairs Division and responsible for the CCI Theme of the Year 2012
  Phone: +49 (0) 911 1335-299
  Email: robert.schmidt@nuernberg.ihk.de
  Areas: innovation, energy and environmental policy, raw materials, energy, material efficiency, network, clusters

- **Armin Siegert, Dipl.-Volsw.**
  Head of International Division
  Phone: +49 (0) 911 1335-397
  Email: armin.siegert@nuernberg.ihk.de
  Areas: key questions regarding foreign trade and trade fairs

- **Dr. Elfriede Eberl, Dipl.-Physikerin**
  Innovation & Environmental Affairs Division
  Phone: +49 (0) 911 1335-431
  Email: elfriede.eberl@nuernberg.ihk.de
  Areas: innovation management, research, universities, new technologies

- **Tina Engelmann**
  Innovation & Environmental Affairs Division
  Phone: +49 (0) 911 1335-298
  Email: tina.engelmann@nuernberg.ihk.de
  Areas: CCI recycling exchange

- **Knut Harmsen, Dipl.-Inf. (Univ.)**
  Innovation & Environmental Affairs Division
  Phone: +49 (0) 911 1335-320
  Email: knut.harmsen@nuernberg.ihk.de
  Areas: information technology, microelectronics, telecommunications, data protection, green IT

- **Andreas Horneber, Dipl.-Ing. (FH)**
  Innovation & Environmental Affairs Division
  Phone: +49 (0) 911 1335-204
  Email: andreas.horneber@nuernberg.ihk.de
  Areas: energy coaching, energy efficiency, climate protection, funded programmes
Stefan Hübel, Dipl.-Betriebswirt (FH)
Innovation & Environmental Affairs Division
Phone: +49 (0) 911 1335-445
Email: stefan.huebel@nuernberg.ihk.de
Areas: environmental management (EMAS), packaging management, occupational and consumer protection, qualification

Dr. Ronald Künneth, Dipl.-Chemiker
Innovation & Environmental Affairs Division
Phone: +49 (0) 911 1335-297
Email: ronald.kuenneth@nuernberg.ihk.de
Areas: energy industry, consulting regarding the Closed Substance Cycle and Waste Management Act, automation and production engineering, mechatronics, power electronics

Manfred Reinhart, Dipl.-Ing. (FH)
Innovation & Environmental Affairs Division
Phone: +49 (0) 911 1335-326
Email: manfred.reinhart@nuernberg.ihk.de
Areas: materials, new materials, process technology

Christian Seitz, Dipl.-Pol. (Univ.)
Innovation & Environmental Affairs Division
Phone: +49 (0) 911 1335-213
Email: christian.seitz@nuernberg.ihk.de
Areas: Automation Valley, electromobility, funded programmes, green mobility

Martina Stengel, Dipl.-Kffr.
Regional Economic Policy and Business Support Division
Phone: +49 (0) 911 1335-452
Email: martina.stengel@nuernberg.ihk.de
Areas: promotion of local trade and industry, business location information system (SISBY), urban land-use planning

Dagmar Tischner
Innovation & Environmental Affairs Division
Phone: +49 (0) 911 1335-319
Email: dagmar.tischner@nuernberg.ihk.de
Areas: CCI Technology Exchange
Publishing information

■ Publisher
Nuremberg Chamber of Commerce and Industry
Innovation & Environmental Affairs Division
Hauptmarkt 25 | 27, 90403 Nürnberg
Dr.-Ing. Robert Schmidt
Email: iu@nuernberg.ihk.de
Internet: www.ihk-nuernberg.com

■ Editorial team
Dr. Robert Schmidt, Dr. Elfriede Eberl, Susann Elßner, Knut Harmsen,
Andreas Horneber, Dr. Ronald Künneth, Jonas Müllemeister

■ Layout and design
Birke | Partner GmbH Kommunikationsagentur, Erlangen

■ Photographs
Fuchs Fotodesign, Erlangen; Fotolia; Heinz Wranchesitz,
Wilhermsdorf; N-Ergie; iStockphoto; BilderBox

■ Cartoons
p.2 Falko Honnen; p.15 Gerd Bauer (from WiM 01|2012)

January 2012
It’s an ill wind that blows nobody good.
Further links

www.facebook.com/energieundrohstoffe

CCI Theme of the Year 2012:
Energy and raw materials for tomorrow
www.ihk-nuernberg.de/jahresthema2012