



INNOVATION NEWSLETTER

++++ October 2011 +++++

TECHNICAL INNOVATION

Furnaces for burning local kinds of low-quality fuel in small population centres

Professor V.S. Severjani from the Brest State Technical University has constructed furnaces for burning local kinds of low-quality fuel in small population centers (heating systems, various heating technologies). The main peculiarities are as follows: intensification of the air feed into the combustion zone, self-cleaning of the furnace elements, and complete afterburning. Designed for burning sawdust, branch wood, bark, and foliage as well as for incinerating oil covered sand, combustible waste and garbage. The burning mass is either whirled with air-cooled blades ("rotor furnace") or is placed on step-shaped burning grate. Can be used in heating systems of small manufacturing facilities, hothouses, etc.

The Brest State Technical University offers their advice in designing and implementing the above mentioned technical proposal. They will take care of all legal and patent aspects will develop and disseminate promotional material.

FURTHER INFORMATION:

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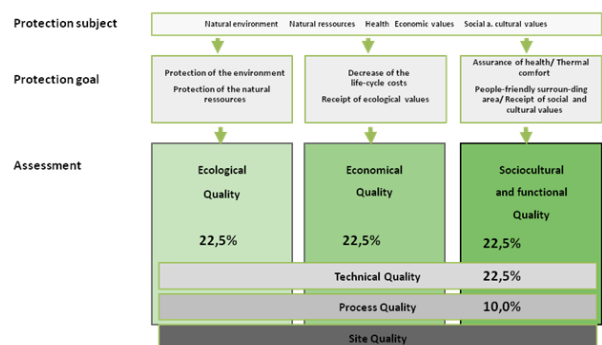
Sustainable Buildings – DGNB Certification

The German Sustainable Building Council has developed a certification system which meets the changing requirements in the construction and real estate sector.

The DGNB system was developed in order to provide a certification system based on international codes and standards making it easy to use in various countries while at the same time provide the high quality and transparency based on the DGNB philosophy. The system, available entirely in English, bases each of its criteria on corresponding European Standards. Depending on the extent the requirements were fulfilled, the certificate is given in bronze, silver, or gold. The degree of fulfillment is given as a percent and a grade. With an overall degree of fulfillment of at least

- 50 %, a bronze certificate is awarded
- at least 65 %, silver
- at least 80 %, gold.

Weighting of the aspects



Copyright: DGNB

Figure: Weighting of the qualities

The DGNB system supports planners and construction firms in the realization of sustainable buildings. It makes it possible to assess a building's overall performance. Along with precerti-



fication, the DGNB criteria can be used to identify efficient, inexpensive steps during the planning phase. Furthermore, the DGNB pre-certificate gives investors the confidence during the early planning stage that the building's performance targets can actually be reached once the building is completed.

The DGNB system is the first, and to date the only system worldwide in which the procedure for adaptation to different countries is an integral part of the system itself. This adaptation takes into account different climatic zones, associated cost-benchmarks, and a specific database for life-cycle assessment, within which the datasets for all European countries are made available. The DGNB system is therefore directly applicable within Europe – and often even beyond.

The DGNB system thus offers a comprehensive definition of sustainability in the building sector that can help to make a real step ahead towards a better built environment benefitting all of us – today, tomorrow, and beyond.

FURTHER INFORMATION:

The information above is from an article by Dr. Frank Heinlein, Director Strategic Management, Deutsche Gesellschaft für Nachhaltiges Bauen, which will be published in a conference volume by the Baltic Sea Academy (www.balticsea-academy.eu)

Further information through the Hanseatic Parliament: info@hanse-parlament.eu

STUDIES

Study on SMEs and environment

In connection to the Small Business Act the European Commission published a study on

the impact of SMEs on the environment in the EU27: "SME and the environment in the European Union".

The main objectives of the study are:

- Measuring the impact of SMEs on the environment
- The impact of EU environmental measures on SMEs
- SMEs business opportunities

The main findings of the study are:

- SMEs contribute with roughly 64% to industrial pollution in Europe
- Environmental impact results from combined total rather than individual company impact across sector
- Sectors of environmental priority
- SMEs find it more difficult to comply with environmental legislation than larger companies
- Main Environmental legislation concerns for SMEs
- SMEs are aware of main environmental national legislation rather than that of the EU
- SMEs lack knowledge regarding specific environmental legislation affecting them
- SMEs bear administrative burdens deriving from monitoring and reporting obligations
- Environmental tools and solutions investment is mostly a priority concern in SMEs with high environmental impact
- Certified environmental management systems (EMS) are more attractive solutions for medium and large sized as well as high impact companies



- Non-certified environmental management systems can be easily applied by SMEs

FURTHER INFORMATION:

Study:

http://ec.europa.eu/enterprise/policies/sme/business-environment/files/main_report_en.pdf

First Report on the competitiveness of the Innovation Union

The European Commission has published the first report on the competitiveness of the Innovation Union. The comprehensive report includes an atlas as well as country-factsheets with country specific statistics. The report is intended to be updated every second year.

The key findings are:

- The EU is slowly advancing towards its 3 % R&D target - but there is a widening gap between the EU and its world competitors notably due to weaker business R&D investment
- The economic crisis has hit business R&D investments hard. However, as part of a counter-cyclic effort, many European countries are maintaining or increasing their levels of public R&D funding
- Europe is host of a large and diversified pool of skilled human resources in particular in Science and Technology, which the business sector is not fully nor optimally making use of; in terms of new tertiary educated graduates, China now weights as much as the EU, the United States and Japan combined
- While remaining a top player in terms of knowledge production and scientific excellence, Europe is losing ground as regards the exploitation of research results
- Member States are introducing reforms to improve the functioning of the public research base and increase public-private cooperation - however knowledge transfer in Europe remains weak
- The development of the ERA underpins the evolution and efficiency of scientific activities in Europe
- Europe is increasing its international cooperation in science and technology, while striving to catch up with the United States
- The gender balance in the European research population is improving, but major research institutions continue to be predominantly led and managed by men
- European SMEs are innovative but they do not grow sufficiently. The United States has shown a much better capacity to create and grow new companies in research-intensive sectors over the last 35 years
- Weaker framework conditions for business R&D and a fragmented European market for innovation are hampering private R&D investments and affecting the attractiveness of Europe
- Sustainable economic competitiveness in high knowledge-intensive sectors requires faster structural change in Europe



- Europe has a strong potential in technological inventions for societal challenges and new global growth areas, which could be successfully brought to the market by implementing the comprehensive and integrated approach set out in Innovation Union

FURTHER INFORMATION:

Study:

http://ec.europa.eu/research/innovation-union/pdf/competitiveness-report/2011/executive_summary.pdf#view=fit&pagemode=none

Upcoming Events

November 10, 2011: Jelenia Góra/ Poland 18. Polish-German-Czech cooperation forum for companies

The forum addresses manufacturer and service companies in the following sectors:

- Metal processing, engineering, electrical machines, electrical engineering
- Renewable energy, environment engineering (waste management)
- Construction, structural and civil engineering
- Processing of wood and plastics
- Industrial automation
- Suppliers to the industry

Aim of the forum is to support small and medium sized manufacturer and service companies in the initiation of economic contacts between German, Polish and Czech companies, the dissemination of innovative ideas, exchange of experiences, and technology transfer.

FURTHER INFORMATION:

http://www.karr.pl/pr_strona.asp?idm=113&n=%3Cb%3E18.POLNISCH-DEUTSCH-TSCHECHISCH-ES%20KOOPERATIONSFORUM%20F%DCR%20FIRMEN%2010.11.2011%3C/b%3E&id_gl=12

NOVEMBER 29 – DECEMBER 1, 2011 IN AMSTERDAM (NL): EWEA OFFSHORE 2011

The EWEA OFFSHORE is the world's largest offshore wind energy event. The EWEA OFFSHORE 2011 conference and exhibition will build on the huge success of the 2009 edition, which attracted over 260 exhibitors and 4,850 participants in total.

This year's event will set a new record: Combining a high quality conference programme with a large, international, cross-sector exhibition, it will be the biggest and busiest ever.

It represents an unmissable opportunity to:

- Discover the latest industry best practices
- Create new business opportunities with global contacts in a flourishing market
- Network with international leaders shaping tomorrow's energy market

FURTHER INFORMATION:

<http://www.offshorewind2011.info/>

November 21-22, 2011: Kolding/ Denmark International conference on Food Processing Hygiene

The conference intends to give the processing industry and their suppliers of equipment inspiration on how to improve the processing procedures for increased productivity and food safety.



You will learn in which direction the future products are designed and processed and how hygienic design can improve productivity.

You will meet representatives from international supermarket chains, European and Danish knowledge centers, authorities, food industry and equipment manufacturers.

You will benefit from hands-on workshops elaborating on line real time analysis, robots and robotized food manufacturing and courses in hygienic design and certification.

You will gather basic knowledge about construction materials, microbiology and biofilm.

You may choose to discuss future business potentials on 1:1 business meetings with other conference participants

You will enjoy participating in the Galla Dinner November 21st. Additional price 65 EUR.

Conference fee for EHEDG and Staalcentrum members: EUR 600 for members and EUR 720 for non-members.

FURTHER INFORMATION:

<http://www.conferencemanager.dk/processing-hygiene/the-event.html>

**NOVEMBER 22 – 25, 2011 IN POZNAN (PL):
POLEKO – INTERNATIONAL FAIR FOR ENVIRONMENTAL PROTECTION**

The latest solutions in the field of environmental protection, representatives of international industry leaders, special areas, specialised conferences and business meetings - all of these will be included in POLEKO International Trade Fair of Environmental Protection, which will be held in Poznan from 22 to 25 November 2011. POLEKO is a meeting platform for professionals from the environmental protection industry from Poland and abroad. It is also a place for

promotion of innovative solutions in this field. The extensive display includes separate thematic sectors:

- Water, sewage
- Waste, recycling
- Energy, renewable energy
- Air, noise, vibrations
- Climate change
- Revitalisation, reclamation
- Municipal and energy construction
- Control and measurement equipment
- Environment security systems
- Flood protection
- Environmental protection consultancy and institutions
- Ecological education

Just like last year, POLEKO Fair will include the following four exhibitions: Clean Energy Exhibition, Recycling Exhibition, Control and Measurement Equipment Exhibition and Science for the Environment Exhibition.

FURTHER INFORMATION:

<http://poleko.mtp.pl/en/>

Part-financed by the European Union (European Regional Development Fund and European Neighbourhood and Partnership Instruments).