

# European Council of Civil Engineers

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# Wlodzimierz Szymczak message closing his term as ECCE President



Dear ECCE Members,

Dear recipients of this publication,

We have just launched the next issue of ECCE e-journal. This is the last one under my Presidency.

During the last two years we have continued our efforts directed on enhancing and developing our e-journal both technically and as far as the content is concerned.

As you will certainly notice, with this issue we started closer cooperation with our partners worldwide. We offered them the attempt of making our existing Agreements of Cooperation more dynamic. We sent to our partners the ECCE's documents and publications which we consider to be of interest for them. In exchange, you can find in this edition of the e -journal the articles from USA, Japan, India and in the next

issues we are expecting a contribution also from Korea.

We will continue this direction. I have a dream to create our e-journal as a publication which is interesting, valuable, recognizable and respectable in Europe and worldwide.

I see it as a platform for presenting and discussing the ideas concerning each aspect of Civil Engineering Profession. However, to achieve that our work and commitment is definitely needed. I mean all of us: EC-CE Members Full, Associate and Individual, our Partners, National Delegates, participants of our General Meetings and even every single civil engineer.

Therefore, I am calling for your contribution, for your documents!

Your articles, scientific, professional, informational or even philosophical are very welcome and impatiently expected.

Remember please, that the most important thing on the way to success is the ATTITUDE.

Accepting and positively answering my call, we can go deeper with bringing into practice the ECCE motto:

### "Civil Engineers at the Heart of Society, building Life Quality and a Sustainable Environment"

My Best Wishes to all of you,

Wlodzimierz Szymczak President of The European Council of Civil Engineers

## NEWS FROM:

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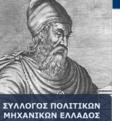
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Upcoming 21 Events

# 64th ECCE General Meeting 21-22 October 2016, Athens, Greece



European Council of Civil Engineers







The 64th ECCE General Meeting will take place on 21 - 22 October 2016, in Athens, Greece hosted by the Association of Civil Engineers of Greece in cooperation with the Technical Chamber of Greece. On Saturday 22 October the elections for the new ECCE Executive Board will be held too.

### ⇒ Preliminary Agenda

In order to register for the 64th ECCE GM please fill in the registration form below and return it to the ECCE Secretariat as well as to the Technical Chamber of Greece at the e-mail addresses indicated in the form.

### ⇒ 64th ECCE GM registration form

For further information including accommodation please visit our website here.

# Be an ECCE Member (EUCivEng) ECCE Individual Membership



#### The European Civil Engineer

The profession of the Civil Engineering is mostly performed where the construction is being made, in Europe or in any part of the world.

Today, within the European Union, construction companies have activities in many countries, so civil engineers have to move to foreign countries and to work all over Europe.

To allow this professional movement EU published a Directive on Professional Mobility, to facilitate the recognition of Civil Engineers across Europe.

Nevertheless the Directive considers under this title, professionals with quite different academic or pro-

fessional backgrounds, what can lead to unclear situations for society.

The EU Directive on Mobility proposes the creation of a European Database of Civil Engineers, interconnected through national organizations.

ECCE appeared in1985 to promote the quality of Civil Engineering with a professional recognition where academic/ professional quality is guaranteed by the national organizations.

ECCE as representative of those organizations, and to promote quality in professional recognition, is opening its membership to individual members, allowing for their image recognition as European Civil Engineers.

Join ECCE, be a EUCivEng!

### ECCE goals:

- To present in Brussels the views of the European civil engineers.
   (ECCE participates in the High Level Tripartite Forum for Construction in EU)
- To establish international contacts with other associations.
   (ASCE, JSCE, KSCE, ECCREDI, Mediterranean countries, etc.)
- To promote the relevant professional information across Europe (Publication of e-journal, books, reports, etc.)
- To organize Conferences across Europe about Civil Engineering (See the conferences presentations in ECCE website)

#### May I become an Individual ECCE Member?

Yes, although ECCE is an association of national organizations, individual civil engineers may also be Individual Associate Members, with access to all the information and discussion forums, but they may not vote in ECCE General Assemblies.

Being an ECCE individual member you will have the reference EuCivEng

#### What do I get as an ECCE Individual Member?

- If you just want to be an ECCE member, you will receive: The e-journal and all relevant information from EU Commission
- If you want to come to our meetings, you will get:
  - Participation in 2 International conferences per year;

Participation in 2 General assemblies per year;

Participation in Brussels Engineers Day each 3 years;

To be in contact with civil engineers across Europe (EU and nonEU).

• But if you want to be really active,

You are welcome to participate in the discussion forums or to propose position papers to be submitted to Brussels.

### And you get also the ECCE membership card !





al Data ily Name n Date onality

Professional Data 6. Chamber / Organiza 7. National Profession 8. Membership Numbe

Organization Ordem dos Engenheiros fessional Title Civil Engineer Number OE13818

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 The ECCE card identifies you, through your national organization, as a Professional of Civil Engineering in your country and a **EUCivEng** in ECCE.

• It is expected that in the future the card will allow an automatic civil engineering identification across Europe, according to the EU Mobility Directive, when national organizations implement their database of Civil Engineers.

### How can I become an ECCE Individual Member?

Please send to ECCE headquarters (<u>ecce\_sps@otenet.gr</u>):

- 1. Registration Form
- 2. Document from your ECCE National Organization
- 3. Excel sheet with your information + Photo

After receiving the notification of acceptance proceed to the Payment Details.

### What are the Payment Details?

- To be an ECCE individual member there is an anual fee of 20 euros.
- If you are older than 65 you pay only once 30 euros and you become member with unlimited validity.
- You can pay in packages of 3 years (60 euros) or 5 years (100 euros),
  - plus 5 euros, with each package, for mail and printing of a new card.
  - . The payment should be sent by bank transfer to:
    - 1. Bank: National Westminster Bank plc, Charing Cross Branch
    - 2. IBAN: GB28 NWBK 6072 1408 5260 60
    - 3. BIC: NWBK GB 2L
    - 4. Account name: European Council of Civil Engineers
- After payment send a copy of the bank transfer with all the other documents. (if your membership is not accepted you will be reimbursed)

# <u>Join us now!</u> Become an ECCE Member (EUCivEng)

CNI President Zambrano on the earthquake in Central Italy -Zambrano: "Focusing on prevention. We have technical skills and competences to secure the buildings at risk"



The President of the National Council of Engineers (CNI), Armando Zambrano, spoke about the seismic event that devastated the center of Italy on 24th August 2016.

"The destructive events of this night are unfortunately nothing new, especially in the Apennines. In these areas there are still stone buildings built in years when there were no anti-seismic regulations. There should be a strong adjustment action, as we engineers have been asking for years, since the time of the earthquake in Irpinia. Simple rules are needed to allow action in the historic centers. In addition, knowledge of the security level of a building must become an essential part of its identity card. It is absurd that in the property sale procedure an energy class certificate is nec-

essary but not a document certifying that the property adapts to earthquake standards."

"In our country - continued Zambrano - an intense action of verification of construction safety is required. This is easily achievable, especially when you consider that we in Italy have developed the tradition of conservation. Universities, professional and scientific communities have developed over the years a number of techniques that can



make all buildings safe. There is no property that cannot be improved by a seismic point of view. For years we have been studying these issues, we are leading the world and today we are able to solve these issues even at acceptable costs overall."

Zambrano then focused on the activities that need to take place immediately after the emergency. "The affected areas - he said - can surely be rebuilt maintaining the building fabric. This is the way forward, avoiding repeating the mistakes of the past with the "new towns" which in the

long run, have an unsustainable social impact. The reason is that often it costs much more to build the new towns from scratch than to intervene in the existing constructions. The important thing, though, is to be quick. In this sense we engineers are available to write precise rules that go beyond the bureaucracy and allow people to return to their homes as soon as possible. In the meantime, we already from Friday we will provide 1,600 engineers who will assess the condition of individual dwellings, so as to allow a portion of the affected citizens to return in their homes in maximum security conditions. "

Finally Zambrano has proposed a debate at European level. "It must be said that we have some difficulty in making clear to our European partners the importance of the seismic aspect. It is not by chance that in Brussels more weight is given to the issue of energy saving than to the safety of the buildings. This is because the problem is perceived as marginal, since it essentially concerns two countries of southern Europe, Italy and Greece. It would be important to get results on this ground because it could divert precious EU funds on seismic risk reduction."

Rome, August 24, 2016

The European Council of Civil Engineers has been in contact with the CNI President Zambrano stating its readiness to offer any possible support and assistance to the CNI and Italian and European engineers in reinforcing their role in the society in order to introduce more and more technical measures to diminish the consequences of earthquakes and protecting human lives at the same time.

# World Prize in Innovation on Bridge Engineering WIBE Prize



The great World Prize in Innovation on Bridge Engineering!

Abstract Submission: 1 week to start.

Be ready for it. You might be the winner!

#### Highlights:

Subject: Paper in the field of Bridge Engineering.

**Winner:** author(s) of a "Paper" that demonstrates the greatest potential of innovation and contributes to the development of Bridge Engineering worldwide

**Jury:** A qualified Jury essentially nominated by the most recognized international associations (13 members) The European Council of Civil Engineers was honored by having been invited to be a member of the Final Jury for the WIBE Prize 2017.

#### THE PRIZE: 50.000 USD\$

**Promoting Entities:** Faculty of Engineering of the University of Porto (FEUP) & Bridge Engineering Solutions company – BERD.

#### Key Dates:

Now: Pre-Registration Opened & Official Regulation Online

**01 October to 31 December 2016:** Submission of Abstracts and other documents as per the Regulation.

Check out the WIBE site for more information: www.fe.up.pt/wibe

For further information you could also contact directly the WIBE Prize 2017 team at the e-mail address wibe@fe.up.pt.

# **News from International Partners of ECCE**

# American Society of Civil Engineers (ASCE)

### Sustainability: For ASCE, It's A Global Issue

The United Nations estimates that today, over half the world's population lives in urban locations, and by the year 2050, the number of urban dwellers is expected to approach 70 percent. It has also been said that as much as 60 percent of the infrastructure needed to accommodate this population shift has not yet been put in place.

This massive shift in the urban population will bring unprecedented demands in the world's cities for land, energy, transportation, waste disposal, and healthcare. Without innovative strategies for dealing with this demand, the world may expect to experience the harmful effects of inadequate infrastructure and the loss of our natural resources, as well as the grave economic and human costs caused by shortages in food, water, and other essential needs.

Yet for engineers, this explosion in our urban population should not be viewed as a problem or a threat, but rather as a call to action for engineering professionals—individually and collectively—to improve upon and expand sustainable practices.

The National Academy of Science has identified the year 1979 as the earth's "tipping point," that is, when the human consumption of natural resources began to exceed the earth's ability to replenish those resources. Now, almost forty years later, sustainable development offers humanity's best hope of reversing this "tipping point," by expanding the range of technical, administrative, and policy solutions that allow our generation to meet the needs of today without sacrificing the needs of the future.

ASCE's commitment to sustainable development starts at the top with its place among the Society's own strategic initiatives. Moreover, in recognition that sustainability is not only a professional obligation but an ethical one, sustainability has been an integral part of the ASCE Code of Ethics for the past 20 years. Canon 1 of ASCE's ethical code requires that civil engineers will "strive to comply with the principles of sustainable development in the performance of their professional duties," while guideline f under that canon recognizes the importance of "adherence to the principles of sustainable development so as to enhance the quality of life of the general public." Additionally, ASCE's code notes that "engineers should seek opportunities to ... work for ... the protection of the environment through the practice of sustainable development" and that "engineers whose professional judgment is overruled under circumstances where ... the principles of sustainable development are ignored shall inform clients or employeers of the possible consequences."

ASCE's formal policy (Policy Statement 418) on the Role of the Civil Engineer in Sustainable Development defines sustainability as "a set of economic, environmental and social conditions in which all of society has the capacity and opportunity to maintain and improve its quality of life indefinitely without degrading the quantity, quality or the availability of economic, environmental and social resources."

This policy represents ASCE's ongoing commitment to play an active role in establishing a global culture of sustainability, through educational and professional development of our members and by supporting innovation in the use and conservation of natural resources. ASCE seeks to achieve these objectives in a variety of ways.

In early 2016, ASCE hosted a summit that engaged civil engineering leaders with representatives from key stakeholders in government and industry in developing a strategy for transforming the civil engineer's role in building a sustainable future. ASCE 2016 President Mark Woodson, P.E., L.S., D.WRE, F.ASCE, laid out the challenge for summit attendees: "As civil engineers, we have the capacity to change the world. We are the builders of society's infrastructure. But our future prosperity and the world's future is at risk because the infrastructure, the foundation of our future, is dangerously deteriorating and not sustainable."

ASCE's Committee on Sustainability drew from the summit's conclusions to present the Society's board with a call to action. In answer to this challenge, the Board formally endorsed the committee's ambitious goal of ensuring that all civil engineering projects are sustainable.

To this end, the Board approved three key priorities as proposed by the committee:

- Build the capacity of civil engineers to achieve the visions and principles of sustainable development
- Develop new standards and protocols for life-cycle assessment, resilience, and sustainability
- Focus on community needs and purposes, beginning at the development stage of infrastructure projects and programs

To help educate civil engineers and other practitioners around the world on sustainable practices, the Committee on Sustainability is putting together two conferences, one later this year and one in 2017.

The International Conference on Sustainable Infrastructure 2016 (<u>www.icsi2016.org</u>) will be held Oct.17-19, in Shenzhen, China. The conference, produced by the Chinese Academy of Engineering, National Academy of Engineering, Chinese Research Academy of Environmental Sciences, Division of Environmental & Light Textile Engineering, Division of Civil Hydraulic and Architecture Engineering, Human Settlements and Environment Commis-

sion of Shenzhen Municipality and ASCE, will bring together leading academicians and practitioners from across the globe who are engaged in research and implementation of sustainable infrastructure.



From left to right: Thomas Smith, Robert Stevens, Wlodzimierz Szymczak, Mark Woodson

The International Conference on Sustainable Infrastructure 2017 will take place in New York City in October 2017. Following up on **ICSI** 2014 (www.ICSIConference.org) and ICSI 2016, ICSI 2017 will focus on sustainability in the built environment, presenting relevant engineering research, demon-strations and applications that contribute to competitiveness and well-being. It will also work to support the UN Sustainable Development Goals and the NAE Grand Challenges, in particular, how to "restore and improve urban infrastructure." This conference will showcase the latest developments and advances in design, construction, technology, finance, policy and education related to nature-based solutions

and sustainable infrastructure. It will also offer a forum to discuss and debate the creation of healthy and safe communities and future directions for the 21st century.

ASCE's Vision for Civil Engineering in 2025 presents an aspirational picture of the civil engineer of tomorrow, from the perspective of more than 60 experts from around the world.

The *Vision* states that civil engineers in the coming decades should be "stewards of the natural environment and its resources" and that they will be expected to "serve as master builders..., innovators and integrators, managers of risk and uncertainty, and leaders in shaping public policy." To inaugurate this new world, *Vision 2025* seeks to guide the development of policies and programs within the civil engineering community. Achieving this *Vision* is a primary way that ASCE and its members can contribute to achievement of the Sustainable Development Goals adopted at the United Nations Sustainable Development Summit in September 2015.

The new Goals call on countries to endeavor to achieve 17 Sustainable Development Goals over the next 15 years. Achieving these goals will eliminate extreme poverty and improve the quality of people's lives around the world, and science and engineering must play a leading role in this effort.

ASCE, leveraging its Policy on the United Nations' Sustainable Development Goals (Policy Statement 517), works in collaboration with other domestic and international organizations to engage engineers in addressing the needs of under-served communities through capacity building and sustainable solutions. By helping to achieve the Sustainable Development Goals, the engineering profession contributes to a world where all people have the resources to meet their basic human needs and where the principles of sustainability are deeply rooted in all construction, energy, transportation, communication, and development activities.

In 2011, ASCE joined with the American Public Works Association and the American Council of Engineering Companies to launch the Institute for Sustainable Infrastructure (ISI). Within 18 months, ISI created an infrastructure rating system to assess the sustainability of civil engineering projects. Incorporating the triple bottom line approach that examines a project's social, economic and environmental impact, Envision® became the first comprehensive sustainability rating system for all types of non-building infrastructure projects in the United States – from transportation to water and wastewater. Today, over 4,500 professionals have become certified to apply the Envision sustainability rating system and have earned the designation ISI Envision Sustainability Professional (ENV SP).

Additionally, ASCE is an active member of the American Association of Engineering Societies, the International Activities Committee, and the Task Force on Global Sustainability. The Task Force is working with U.S.-based member engineering societies to advance the Sustainable Development Goals. In addition, the Task Force is leading the effort to encourage engineering societies around the world through the World Federation of Engineering Organizations to make the role of engineering in the United Nations and in achieving the goals more visible. The Formal Engineering Education Committee of the ASCE Committee on Sustainability is actively engaged in educating U.S. engineering faculty and creating educational modules to promote awareness in classrooms and encourage contributions towards achieving the goals.

Through its longstanding close affiliation with Engineers Without Borders-USA, ASCE offers opportunities for engineering students and practitioners to take part in humanitarian engineering projects, and to train citizens of developing communities throughout the world in how to implement sustainable solutions and become self-sufficient. Volunteers on EWB-USA projects work to improve the quality of life for communities that may be challenged even with providing for their residents' basic life necessities. Through our support of EWB-USA, ASCE has made a significant, long-term commitment to helping those in need.

To help those in need in the United States, ASCE collaborated to start the Community Engineering Corps in 2014. This alliance between ASCE, the American Water Works Association and EWB-USA connects volunteer engineers around the country with infrastructure projects to help underserved communities. One of the CE Corps' current projects is providing solutions to water-supply and sanitation problems in the Salinas River Valley in California.

Many of ASCE's specialty Institutes have already integrated sustainability into their programs and activities. For example, the Environmental & Water Resources Institute has hosted an annual International Perspectives on Water Resources and the Environment conference for the past eight years in nations including India, Thailand, Singapore, Morocco, Turkey, and Ecuador, with the goal of sharing knowledge to combat some of the world's toughest water-related problems. The 2016 conference took place in Colombo, Sri Lanka.

I encourage all civil engineers to reflect upon the ideals that motivated them to take up the profession, and what they would like their legacy to be. For our generation, I believe building a sustainable future is both possible and achievable. Now more than ever, we must work together to understand our present challenges, to harmonize the natural and built environments, and to identify and implement sustainable solutions to improve the global quality of life for generations to come.

Thomas W. Smith III, ENV SP, CAE, F.ASCE

ASCE Executive Director



#### Thomas W. Smith III, ENV SP, CAE, F.ASCE

A dedicated member of the American Society of Civil Engineers for more than 25 years and a civil engineer by training, Tom \$ Smith served as the association's deputy executive director and Smith general counsel before becoming the executive director in January 2015. Established in 1852, ASCE is the oldest national professional engineering society. With a membership of over 150,000 and an annual operating budget of over \$65 million, the j, Society is dedicated to advancing the art, science and profession ENV of engineering for the betterment of humanity. Smith is responsible for the day-to-day management of the Society. He provides executive leadership to a staff of 280 and an active volunteer SP workforce of over 7,500, facilitating ASCE's tradition of supplying high-quality and high-value products and services to its members CAE. and other customers worldwide.'

# Japan Society of Civil Engineers (JSCE)

### Our activities and challenges for the future

The Japan Society of Civil Engineers (JSCE) was established in November 1914 to promote the field of civil engineering, expansion of civil engineering activities, and enhancement of civil engineering qualifications, thereby contributing to scientific advancement and social progress. It is one of the largest academic organizations in Japan with approximately 40,000 members as of the end of July 2016. Based in Tokyo, JSCE has eight regional chapters in Japan and nine international sections.

JSCE's activities are focused on the goals, "Contribution to the advancement of science and technology", "Direct contribution to society" and "Promotion of exchange among members and enlightenment of members".

Since 1990, JSCE has developed its activity goals and action plans every five years, which JSCE base their activities on. The latest action plan, JSCE2015, was created in 2013 and consists of twelve important challenges that JSCE struggle to solve, including the following:

- Construction of a base for post-earthquake recovery and disaster prevention/mitigation
- Integration of civil engineering technologies for recovery from the Fukushima Daiichi Nuclear Power Plant accident
- Maintenance, improvement and addition of infrastructure functions, and development of a system for reducing
  or sharing the burden on future generations
- Promotion of the transfer of international technological values

An English version of JSCE2015 is available at:

http://committees.jsce.or.jp/kikaku/system/files/JSCE2015 gaiyou ENG.pdf

Based on the JSCE2015 action plan, numerous committees have been established to conduct research and studies on specialized subjects. JSCE provides the opportunity for members to present their original research and study results through lectures, training sessions, symposiums, conferences, panel discussions, etc., and also disseminates knowledge on civil engineering technologies through field study trips and other events. The Japanese monthly *Civil Engineering* magazine has been published by JSCE since its foundation and the JSCE journals are published online to promote exchange among civil engineers and enhance their technical capabilities. In addition to the magazine and journals, many other publications are issued, including reports on research and study findings by various committees. JSCE also publishes technical standards for Japanese civil engineering technologies, such as the *Civil Engineering Handbook*, the *Standard Specifications for Concrete Structures*, the *Standard Specifications for Tunneling*, and *Hydraulic Formulas* (English versions are available for some publications), which provide important reference material for technological advancement.

English publications are available at:

### http://www.jsce.or.jp/publication/catalog.asp?id=2

The committees that conduct technical research and studies are part of the Research & Studies Division, and they currently total twenty-nine study committees in seven fields (Table 1). Since 2003, the Research & Studies Division has called for Important Research Themes from committees in the division, joint organizations involving multiple committees, and voluntarily formed research groups, offering subsidies for research and study on selected themes (Table 2).

#### Table 1 Research and Study Committees

Field I (Structure): Structural engineering, Steel structures, Hybrid structures, etc.

Field II (Hydroscience): Hydraulic engineering, Coastal engineering, etc.

Field III (Ground): Tunnel engineering, Geotechnology, etc.

Field IV (Planning): Civil engineering and planning, Civil engineering history, etc.

Field V (Concrete): Concrete, Pavement

Field VI (Construction Technology Management): Civil engineering information technology, Construction technology management, etc.

Field VII (Environment and Energy): Environmental engineering, Civil engineering for nuclear power plants, etc.

#### Table 2 Important Research Themes for FY2016

Theme title	Recommending committee
Construction and implementation of a management system for ensuring the quality and durability of concrete structures and developing human re- sources	Concrete Committee
Quantitative analysis of proactive measures for tsunami disaster mitigation and examination of the possible implementation in society	Coastal Engineering Committee Infrastructure Planning and Management Committee

The International Chapter of JSCE has nine sections (Taiwan, South Korea, the U.K., Mongolia, Turkey, Indonesia, Thailand, the Philippines, and Vietnam) intended to promote exchange among civil engineers in each country and Japan, as well as international activities such as the provision of information on Japanese technologies. The overseas sections hold international symposiums and JSCE seminars and support investigation teams from Japan. They also pursue their own activities aimed at increasing the use of Japanese civil engineering technologies and promoting exchanges among civil engineers. In addition to setting up the overseas sections, JSCE established the International Activities Center (IAC) in April 2012 to actively promote international contribution activities including information provision, technical exchange/transfer, education, and support of foreign students. As one example, complimentary English newsletters containing information on the international activities of JSCE and civil engineer-ing technologies readers.

You can read back issues or subscribe the newsletter at: http://www.jsce-int.org/node/467

For further promotion of its international exchange activities, JSCE introduced a free overseas associate membership system in 2016. Membership is intended for foreigners living overseas who will play a supporting role in overseas activities. JSCE intends to provide associate members with updates on the trends (such as civil engineering technologies and projects) in the civil engineering industry in Japan as well as the information needed for participating in events held by overseas sections. (http://www.jsce-int.org/node/450)

Japan is one of the few countries that suffer from many natural disasters. In the past 20 years, six major fatal earthquakes have occurred in Japan (Table 3). In April this year, 64 people (as of August 2016) were killed in Kumamoto when two major earthquakes (M6.5 and M7.3) occurred in succession within only 30 hours, something never before experienced in Japan. Thus, the civil engineering industry in Japan has learned many lessons from newly emerging disasters and has developed its technologies based on these lessons.

The M9.0 Great East Japan Earthquake in 2011 was the largest earthquake observed in Japan. The massive tsunami exceeding 10 meters in height caused catastrophic damage to the area ranging from the Tohoku to Kanto districts on the Pacific Ocean side, which led to the accident at TEPCO's Fukushima nuclear power stations. Many residents are still displaced due to this disaster. While the Earthquake forced the industry to review the validity of technologies and systems fostered through past lessons, it also provided an important new lesson: disasters that we cannot imagine or anticipate will surely occur in the future. In other words, we must prepare for the unexpected.

Jan. 1995	Great Hanshin-Awaji Earthquake	M7.3	6,437 people lost or missing (as of May 1996)*
Oct. 2004	Niigata Prefecture Chuetsu Earthquake	M6.8	68 people lost (as of Oct. 2009)**
Jul. 2007	Niigata Prefecture Chuetsu-oki Earthquake	M6.8	15 people lost (as of Oct. 2009)**
Jun. 2008	lwate-Miyagi Nairiku Earthquake	M7.2	23 people lost or missing (as of Feb. 2009)**
Mar. 2011	Great East Japan Earthquake	M9.0	18,456 people lost or missing (as of Mar. 2016)**
Apr. 2016	Kumamoto Earthquake	M7.3 / M6.5	64 people lost (as of Aug. 2016)**





In Japan, the concept of disaster mitigation as a measure against such unexpected events has attracted considerable attention. As for structural (hardware) measures, fail-safe functions and quick recoverability are required. Even if damage is caused by a massive external force, human lives should not be lost and economic loss should be minimized. The non-structural (software) measures of disaster mitigation have also become important since the Great East Japan Earthquake, with many proposals suggesting that both non-structural (software) measures and structural (hardware) measures should be fully mobilized. However, it is not easy to establish the concept of disaster mitigation as a specific civil engineering technology or a social system. That said, it is forecasted that Japan will be struck by large-scale earthquakes including the great Nankai Trough earthquake and Tokyo Inland earthquake in the near future. For example, the Central Disaster Management Council of the Cabinet Office held in 2012 predicted that the great Nankai Trough earthquake would be a largest-class earthquake and tsunami, considering all possibilities based on scientific knowledge including the lessons learned from the Great East Japan Earthquake, and concluded that the magnitude would be 9.1 and as many as 23 municipalities could be hit by a tsunami of 20 meters or higher.

While preparing for such large-scale earthquakes, we need to continue with reconstruction from the Great East Japan Earthquake. It is also necessary to improve public structures to prepare for new types of disasters caused by global warming. Coping with aging public structures that were built on a massive scale in the 1970s is also an important challenge. Thus, there are a great many challenges to be tackled by the civil engineering industry in Japan, and JSCE continues to play an important role at the center of these activities.

#### Ryosuke Takahashi, Dr.Eng

Leader of Information Group, International Activities Center, JSCE

# The Council of Engineering and Technology (CET) India

# The Council of Engineering & Technology (India)

#### **Organization History**

Established under a Society which is registered under Societies Registration Act XXVI of 1961. In India to fill the vacuum of professional engineering society which accepts different disciplines and to improve and establish the standard of Engineering & Technical profession the CET (I) was formed. The CET (I) is registered under Societies Registration Act XXVI of 1961. CET(I) runs as per present policy of AICTE, Govt. of India.

It gives extensive opportunities to make significant contribution for the development of our society. The CET(I) dedicated for the purpose of maintaining and promoting the status of engineering and technology as an ideal profession. The institution's aims are to train & educate budding engineers (at an early stage of development) and technologists of high caliber who are sound in theory and practice.

CET (India) conducts the Degree and Diploma level examinations in Civil, Mechanical, Electrical and Electronics & Communication engineering twice a year for those, who, for various reasons, could not fulfill their ambition to become Degree or Diploma Engineers but had to take up employment at lower level. They want to upgrade their educational qualification and improve their employment status.

CET(I) is also committed to associate in the project of Skill Development for the unemployed youth of the country and various technological consultancy.

CET(I) houses a huge resources of evaluation of Technical Reports, Technical Examination Copies, Practical & Project Reports, Scholar Papers etc. Every year twice, CET(I) evaluates more than 20000 technical papers and reports. CET(I) is responsible for evaluating the examination papers, technical reports, practical & project reports and dissertations of all the students of CET(I) scattered all over India.



#### Activities of CET(I)

CET(I) have more than 150 student chapters all over India consisting of more than 10000

working professional as students and in near future there is a plan to spread their students chapters International level. All Assessment of the Students Membership Examination are done by a experienced group of Academicians of CET(I). So, CET(I) are highly experienced in the field of Assessment. CET(I) conducts DIPCET(I) & AMCET(I) examination twice a year.

CET (I) has done MOU with various AICTE approved institution for the purpose of workshop, practical and project guideline. CET(I) provides many types of membership like Institutional Membership, Corporate Membership, Fellow Membership, Student Membership, Life Time Membership. Presently CET(I) has more than 7000 corporate members scattered all over India and Abroad.

CET(I) Is directly associated with national & international organizations like Engineering Council of India (ECI), Indian Society for Technical Education (ISTE), The Associated Chambers of Commerce & Industries (ASSOCHAM), Quality Council of India (QCI), All Indian Association of Industries (AIAI), American Society for Civil Engineers (ASCE), The Institution of Engineers, Malaysia (IEM) etc., Institute for Physics & Engineering in Medicine(IPEM). CET (I) organizes one National Seminar and several regional seminars every year. It also celebrates events like Engineer's Day & Youth Skills Day etc.

#### Mission

- To contribute to the strengthening of resources for Civil, Mechanical, Electrical and Electronics & Telecommunication Engineering.
- To interface with leading institutions for knowledge sharing and engaging in research and dissemination of related knowledge for the development and also in making it available for the benefit of Society as well as policy makes organizations.
- To create institution of excellence for promoting skill based programs in the field Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering.
- To develop content of course curriculum and research in the field of Technical Education with special reference to Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering
- To create an environment where Civil, Mechanical, Electrical and Electronics & Tele Communication Engineers could take active role in the international community and where Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering technologies may contribute to the amenities for the people at national & international level
- To provide high quality educational programs for the candidates to enable them to achieve success in their immediate as well as long term professional careers and as practitioners in their respective fields.
- To create an understanding and appreciation of professional and ethical responsibility in the practice of Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering.

#### Vision

- To provide awareness of professional as well as technical education.
- To arrange and manage undergraduate and graduate programs in the field of Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering.
- To conduct research in the field of technical education with special reference to Civil, Mechanical, Electrical

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- and Electronics & Communication Engineering.
- To provide professional literacy and other social activities by awareness programmed in the form of seminars and camps.
- To serve as an agency for effective dissemination of information related to Civil, Mechanical, Electrical and Electronics & Communication Engineering, hence to
- To publish newsletters, bulletins or journals and use such other means as felt necessary to further this purpose.
- To conduct vocational training programs in the field of Civil, Mechanical, Electrical and Electronics & Tele Communication Engineering.
- To purchase, acquire the land and building in the name of Institution and make its construction.
- To publish or cause to be published and to print learning and other material developed by the Institution.
- To prescribe rules and conditions for registration of candidates for appearing in examinations in Civil, Mechanical, Electrical and Electronics & Communication. Engineering in consonance with and necessary for the proper fulfillment of its objectives.
- To appoint committees or sub-committees as deemed fit to carry out the objectives of the Institution and to prescribe rules and regulations for the proper functioning of such committees. To do other things, acts, activities, which may be necessary and incidentally conducive to the attainment of objectives of the Institution.

# **News from ECCE Members**

# Germany

Report about the visit of ZDI-representative professor Dr. Carsten Ahrens to Astana, Kazakhstan, and his keynote speech at the

#### Astana Economic Forum – May 2016

In May 2016 professor Ahrens was invited by the National Engineering Academy of the Republic of Kazakhstan to give a keynote speech about solar energy at the famous Astana Economic Forum 2016, see photos.

As ZDI represents also a number of non-civil engineers e.g. electrical engineers this visit was a great success to make up contacts with the Kazakh engineers. The content of the speech was about normal plane and high-concentrating solar photo-voltaic electricity production in this country with extraordinary many days of strong and direct sun irradiation.

In his speech he stated that Kazakhstan is a "solar paradise" concerning its solar potential, which could be harvested during up to 300 sunny days per year. But till today much less than 1 % of the country's energy demand is produced by renewable energies, including photovoltaic. Based on the experience in Germany, a possible way to start increase the solar energy production could be the involvement of the single user instead of installing huge utility solar fields.

As a start-up and demonstration model in Kazakhstan's capital Astana he sketched the possibility to use HCPV-



installations on top of high buildings, and, thus, use partly the building investment. The solar electricity energy of the HCPV can be used, sold, stored and managed in a smart way, which is comparable to handle many small PV-devices. As HCPV-modules produce much heat energy, this energy can be used efficiently and directly within the building for heating in winter and for cooling in summer.

As a result of his speech professor Ahrens is invited to give again a speech as keynotespeaker, but now at the EXPO-2017 in the frame of the World Scientific and Engineering Con-

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gress (WSEC 2017), which takes place again in the thrilling capital Astana, KZ. – You may visit www.wsec.kz and click speakers.

Though Kazakhstan is not directly a European country it is oriented towards Europe, also its civil engineers are highly skilled and closely connected with European universities and architectural and construction offices. Georgia and Azerbaijan obviously are also no European countries, but they are still members of ECCE or in its focus. Kazakhstan should also be contacted by ECCE.

ZDI addresses the need of a closer cooperation within ECCE in the field of construction and civil engineering.

As an excerpt ZDI addresses the following aims for the coming years 2017-2018:

#### Simplifying of Euro-Standards in the fields of engineering!

The problem is obvious, but the detriments are not averted. It must be our duty to strongly intervene for better practicability of the Euro-Standards and, thus, to reduce the high scientification and to purge its content.

#### Strengthening/Supporting the engineer in the future oriented fields of practical work!

Especially the installation and supplying engineers need a stronger support in the public perception. The working fields of installation-energy-environment-engineers are crucial for the climate protection and, thus, have to be supported by EU-politics.

#### Putting forward sustainable construction and building!

Engineering is not just observing rules but generation of sustainable constructions. ZDI is supporting sustainable building and, thus, is putting energy efficiency in the building process and its later maintenance till the phases of sanitation and demolition. The actual focus just on pure energy consumption data is not sufficient.

#### Need of accentuation of threshold limit values for engineering services!

Contracting of engineering services according to the actual practice with its low threshold limit values of payment jeopardizes the existence of small and medium-sized engineering offices. The limit values have to be doubled, and all possibilities have to be used for its achievement.

#### More targeted publicity for engineers!

Whereas public relations work of ZDI has developed quite well, in general it is still a problem to put into the foreground the quality of publications, and not just the amount. The information has to be addressed to the most important target groups (young engineers, entrepreneurs, contractors).

#### ZDI Zentralverband Deutscher Ingenieure – Deutschland The Institute of German Engineers - Germany

# Hungary



2016 meeting of the engineering organizations of the V4 countries

> Budapest, 7-8 October 2016 Conference "Via Carpathia"



The Hungarian Chamber of Engineers as a public body and competent authority in the engineering activities, especially in the field of licencing engineers in construction design and expertise. This covers the design of roads and railway lines as well. The chamber has a great international activity in European level through the European Council of Engineer's Chambers and regionally as well. It has a 23 years tradition of the engineering associations and chambers of the "Visegrád" countries to held annual meetings in one of the countries.

This year the Hungarian Chamber of Engineers is hosting the meeting, and adjoining to it we decided to organize a conference with collaboration of the "Visegrád Fund". The topic of the conference is the proposed project of 7 EU member countries, near the eastern border of the Union, "Via Carpathia". The Hungarian Minister of Foreign Affairs and Trade, and the Hungarian Minister of National Development accepted patronage on the conference.

The north-south road link Via Carpathia corridor considered in the context of the Trans-European transport network (TEN-T) was originally suggested by Poland. The transport ministers of the four countries (Hungary, Lithuania, Poland and Slovakia) agreed in 2006 to create a north-south connection, and in October 2010 in Łańcut three more countries, Bulgaria, Greece and Romania joined to the initiative.

Upon Polish initiation there was a conference held in Brussels in 2012, and the interested countries signed the "Brussels Declaration", asking the European Parliament, the Commission and the Council to consider the route Via Carpathia as part of the TEN-T network.

The Košice Region of Slovakia and the Borsod-Abaúj-Zemplén County in Hungary founded the "European Grouping of Territorial Cooperation Via Carpathia" in order to help the cross border activities and ensuring the realization of the project.

The Hungarian Chamber of Engineers would like to join to these initiatives, organizing an adjoining conference to the 23rd annual meeting of the engineering organizations of the "Visegrád" countries in Budapest on Friday 7th October 2016. We would like to help the preparation works of this project, from the Lithuania to Greece and to accelerate the process of connecting it to the TEN-T network and to start the submission of a feasibility study.



Besides the discussion of the political and economic aspects of the project we would like to focus on the technical questions of it as well:

- matters concerning of geostrategic and economic development of the areas,
- connection to the Trans-European network,

- technical aspects, the building infrastructural construction in connection to the need of the traffic,
- managing the transport corridor in high quality manners, technical collaboration, fuel supply (considering electric cars), harmonising the toll systems etc.

The Hungarian – Polish summit held in Budapest on 3rd June 2016. strengthened the mutual interest and commitment of the two countries in the realization of the Via-Carpathia project.

We consider the high importance to give the opportunity to all interested stakeholders to express their views in order to define the next necessary steps.

#### G. Szőllőssy

**Hungarian Chamber of Engineers** 

# Latvia

A MEMORANDUM OF COOPERATION was signed on 31 May 2016 in Riga.

## Priority tasks for the years 2016 - 2018 aimed at implementation of the MEMORANDUM OF COOPERATION of responsible members of the Cabinet of Ministers and representatives of the construction industry including the Association of Civil Engineers.

1. Improvement of the environment for investments:

1.1 Revision of technical and administrative requirements on the legislative level in compliance with the generally accepted approach of the European Union;

1.2 Streamlining the public procurements and the regulatory framework governing them;

1.3 Drawing up medium-term planning document for the development of the construction industry;

#### 2. Measures preventing shadow economy:

2.1 Determining minimum pay in the construction industry;

2.2 Drawing up standards for the contracts on construction services and enshrining thereof in the legislation;

2.3 Introducing the system of ID cards for employees within the construction industry; 2.4 Drawing up and adoption of the standards of ethics within the construction industry.

#### MEMORANDUM OF COOPERATION OF RESPONSIBLE MEMBERS OF THE CABINET OF MINISTERS AND REPRESENTATIVES OF THE CONSTRUCTION INDUSTRY

Riga, 31 May 2016

Construction industry is a fundamental industry which not only ensures considerable added value and number of work places, but it is also an important factor facilitating the competition within the entire national economy and overall development of the state. Nevertheless, this is possible only under the condition that the construction industry ensures appropriate quality, sustainability and safety.

In the past years the development of the construction industry in Latvia has not been sufficiently determined and balanced.

Shadow economy is inherent for the construction industry to a large extent – disguised employment, tax evasion as well as hiding income dominate. This causes the risk of producing low quality – the construction industry is not capable of attracting new specialists because they are not satisfied with illegal employment, the construction company investments are risky because illegal activities beat the application of innovations and technologies.

Shadow economy causes national safety risks, too. Management of the construction process is formal. Poorly developed quality culture does not ensure self-regulation and thus a probability is increasing that the works performed within the construction industry are not only of low quality, but are also unsafe or even dangerous.

It is impossible to introduce a modern, sustainable, innovative approach into an industry where shadow economy dominates – the customers within the public and private sector are encumbered with the fight for meeting the minimum safety and quality criteria and the contractors willing to work legally, with innovation and quality are driven out of the market.

We have decided to change this situation. Construction will ensure the needs of society and national economy in Latvia. In order to achieve this, Prime Minister Māris Kučinskis, Deputy Prime Minister, Minister of Economics Arvils Ašeradens and Minister of Finance Dana Reizniece-Ozola, on the one party, and companies of Latvian construction industry represented by the association "Latvijas Būvuzņēmēju partnerība" (Partnership of Construction Contractors), association "Latvijas ceļu būvētājs" (Latvian Road Constuctor), "Latvijas Elektroenerģētiķu un Energobūvnieku asociācija" (Electric Power and Energy Construction Association of Latvia), as well as the undersigned associations and companies representing the construction industry, on the other party, have concluded the following

#### MEMORANDUM OF COOPERATION.

- 1. The Parties acknowledge that by cooperation with a view to reduce the impact of the shadow economy to the construction industry and by stimulating the development of high quality, safe and sustainable construction in Latvia, the proportion of shadow economy within the construction industry may shrink by half within three years.
- 2. The Parties acknowledge that it is possible to put the construction industry in order by facilitating a quicker and more efficient implementation of recommendations of the World Bank and the Organisation for Security and Development as well as taking over the standards of best practice of the European states.
- 3. The Parties acknowledge that only by cooperation it is possible to align and improve the legislation concerning the industry, to strengthen the capacity of construction companies and to facilitate their competitiveness in foreign markets, as well as to attract investments for the national economy of Latvia.
- 4. The Parties acknowledge that the Board for Prevention of Shadow Economy established by the Cabinet of Ministers ir the most appropriate format for the initial cooperation in issues of combating shadow economy.
- 5. Latvijas Būvuzņēmēju partnerība (Latvian Partnership of Construction Contractors) hereby undertakes to:

5.1 finance the yearly assessment of the shadow economy in the construction industry;

5.2 develop a draft annual action plan for the reduction of shadow economy in the construction industry (hereinafter – the Plan).

- 6. The Parties commend the Action Plan 2016 2018 developed by Latvian Partnership of Construction Contractors, which is approved by the industry organisations and the officials of the Ministry of Economics responsible for the industry and which is attached as annex to the Memoranda, and undertake to submit it for examination by the Board for Prevention of Shadow Economy.
- The Minister of Economics undertakes to examine the Plan and submit it for examination by the Board for Prevention of Shadow Economy as well as to communicate with Latvian companies of construction industry on industry-related issues on a regular basis.
- 8. The Minister of Finance undertakes to coordinate the control over and the assessment of the implementation of the Plan.
- The Prime Minister undertakes to see that the parties continuously cooperate within the process of developing the regulatory framework respecting the differences in positions and interests as well as ensuring the sustainable development of the industry.
- 10. The Parties undertake to assess the topicality of the Memorandum and the need to update it once a year.
- 11. The Memorandum is open for accession to it also by other non-governmental organisations of the construction industry by submitting a letter of accession.





# **News from ECCE partners and other organizations**

Common Training Principles for Engineers — Review of Stakeholder Workshop organized by ECEC



On 30 June 2016, the first stakeholder workshop in the framework of developing Common Training Principles for Engineers took place in Vienna. ECCE participates in this project as partner of ECEC. Over 60 participants from European Ministries and Engineering Organisations took part in the event and contributed to the discussions of possible approaches. After Sophie Weisswange from the European Commission demonstrated the importance of Common Training Principles and automatic recognition for engineers in Europe in the opening speech, project manager Cornelia Hammerschlag presented the results of the

survey which was conducted in all EEA countries and Switzerland covering the professional groups of Civil and Environmental Engineers, Electrotechnology Engineers, Mechanical and Industrial Engineers, Mining Engineers and Geodetic Surveyors.

At this event, project director Klaus Thürriedl presented the first proposal for a possible approach to Common Training Principles, based on the findings of the preliminary results of the survey. This proposal was subsequent to his presentation discussed in different workshop groups.

Workshop material: http://www.ecec.net/fileadmin/user upload/materials ws 30 June 2016.zip

#### The next steps of the project:

A revised draft proposal - based on the feedback from the workshop - and the draft survey report will be sent out for consultation to all interested stakeholders at the beginning of September 2016.

A final proposal - based on the feedback from the consultation - will be presented at the stakeholder conference in Vienna on 27 October 2016.

# 11th WCCE General Assembly



The World Council of Civil Engineers held its 11th General Assembly from 7th to 10th September 2016 in San José de Costa Rica. The 11th WCCE General Assembly was hosted by the Colegio de Ingenieros Civiles de Costa Rica, founding member of the organization. On the occasion of WCCE's General Assembly, CIC-CFIA held its XV Congreso de Ingeniería Civil.

# **Construction Industry and Material Producers join forces for** better standardization — European Construction sector representatives join Commission and Member States to co-sign the joint initiative on standardization



From left to right: Chistophe Sykes, Ricardo Viaggi, Elzbieta Bienkowska and Ulrich Paetzold

On 13th June 2016, the representatives of three European construction sector associations joined Commissioner Elzbieta Bienkowska in Amsterdam, to co-sign the Joint Initiative on Standardisation. This initiative sets out actions to modernise, prioritise and speed up the delivery of standards by the end of 2019, respecting the needs of their users. It kicks off a dialogue between all the stakeholders involved in standardisation: European and national standardisation organisations, industry, civil society, Member States and the Commis-sion who gathered at the Europe Building to celebrate the agreement, in a ceremony organised by the Dutch Presidency.

Standardisation has a significant impact on the construction sector and the development of the Joint Initiative on Standardisation has been supported by three sectoral federations, namely Construction Products Europe, representing the manufacturers of construction products, as well as EBC and FIEC, together representing construction enterprises of all sizes - from one person micro firms and SMEs to large globally active contractors - across Europe.

For more information please visit the Construction Products Europe website here.

# FIEC Press Release regarding the extension and reinforcement of **Investment Plan for Europe**

**EUROPEAN** CONSTRUCTION INDUSTRY FEDERATION

FIEC says yes to extension and reinforcement of Investment Plan for Europe. You can find the Press Release here.

# **EU Funds and Programmes**

# **Projects of Common Interest**



To help create an integrated EU energy market, the European Commission has drawn up a list of <u>195 key</u> energy infrastructure projects known as projects of common interest (PCIs). These are essential for completing the European internal energy market and for reaching the EU's energy policy objectives of affordable, secure and sustainable energy

PCIs may benefit from accelerated planning and permit

granting, a single national authority for obtaining permits, improved regulatory conditions, lower administrative costs due to streamlined environmental assessment processes, increased public participation via consultations, increased visibility to investors and access to financial support totalling  $\in$ 5.35 billion from the <u>Connecting Europe</u> Facility (CEF) from 2014-2020. The funding is intended to speed-up the projects and attract private investors.

To become a PCI, a project must have a significant impact on the energy markets and market integration of at least two EU countries, boost competition on energy markets and boost the EU's energy security by diversifying sources, and contribute to the EU's climate and energy goals by integrating renewables.

The first list of PCIs was published in 2013. The list is updated every two years to integrate newly needed projects and remove obsolete ones. The next PCI list update will take place in 2017.

# **Connect Europe Facility (CEF) funding 2016**



programme

CEF

A total of €800 million in grants is set aside for PCIs in 2016.

### First CEF Energy call for proposals in 2016

Under the first <u>CEF Energy call for proposals</u> in 2016, <u>€263 million was allocated</u> to PCIs and 9 proposals were selected to receive grants for studies or works. Of those, 5 are in the gas sector and 4 in the electricity sector. The bulk of the support goes to projects in the Baltic Sea region.

List of projects selected for funding under the first 2016 CEF Energy call for proposals

<u>The second CEF Energy call for proposals</u> is open until 8 November 2016 and has an indicative value of €600 million.

# **European Structural and Investment Funds (ESI Funds)**



### **ABOUT THIS TOOL**

Giving access to data on financing and expected achievements under the ESI Funds 2014-2020. Financing data relates to 533 programmes at July 2016. The achievement data relates to November 2015, to be updated with implementation details late 2016.

### USE THIS TOOL ...

This tool can be used to explore the data by choosing one of the 4 options above. They give insights into planned investment aggregated at EU level, at Member State level, by theme or by fund. Data sets can be visualised, embedded in other sites or downloaded to analyse yourself.

### **HELPFUL LINKS**

More information about the ESI Funds:

- Cohesion Fund
- European Agricultural Fund for Rural Development
- European Maritime & Fisheries Fund
- European Regional Development Fund
- European Social Fund

# **Miscellaneous**

# 2050 low-carbon economy

#### The European Commission is looking at cost-efficient ways to make the European economy more climatefriendly and less energy-consuming.

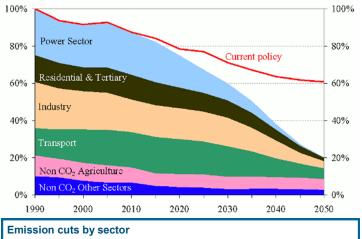
Its low-carbon economy roadmap suggests that:

- By 2050, the EU should cut emissions to 80% below 1990 levels
- Milestonesto achieve this are 40% emissions cuts by 2030 and 60% by 2040
- All sectors need to contribute
- The low-carbon transition is feasible & affordable.

The roadmap suggests that, by 2050, the EU should cut its emissions to 80% below 1990 levels through domestic reductions alone (i.e. rather than relying on international credits).

This is in line with EU leaders' commitment to reducing emissions by 80-95% by 2050 in the context of similar reductions to be taken by developed countries as a group. To reach this goal, the EU must make continued progress towards a low-carbon society. Clean technologies play

an important role.



The roadmap concludes that the transition to a low-carbon society is feasible and affordable but reguires innovation and investments. This transition would

• boost Europe's economy thanks to the development of clean technologies and low- or zero-carbon energy, spurring growth and jobs

help Europe reduce its use ofkey resources like energy, raw materials, land and water

- make the EU less dependent on expensive imports of oil and gas
- bring health benefits e.g. • through reduced air pollution.

To make the transition, the EU would need to invest an additional €270 billion (or on average 1.5% of its GDP annually) over the next 4 decades.

For more information please click here.

# Public consultation on the Single Digital Gateway



The public consultation on the creation of a 'Single Digital Gateway' is open. The Gateway would provide easy online access to Single Market information, procedures, assistance and advice for citizens and businesses.

#### What is the 'Single Digital Gateway'?

The idea behind the Single Digital Gateway is to provide all the information people need to:

- do business cross-border
- travel to another EU country
- live, study or work in another EU country

The Single Digital Gateway would be based on existing portals, contact points and networks. But it would improve and better connect them, and help people to complete the most frequently-used national procedures fully online.

#### Why do we need it?

If you want to travel to, live, work or do business in another EU country you need to find out about the national

rules, requirements and procedures that will apply to you.

Most people go online to find this information.

But online information can be unreliable – it can be incomplete, inaccurate or hard to understand. Sometimes it's only available in the local language, or not accessible from your country.

We want to make it **easier** for people and businesses to find essential information to help them **make the most of the Single Market**.

This initiative was announced in the Commission Communication of May 2015, 'A Digital Single Market Strategy for Europe'. It was also mentioned in the <u>Single Market Strategy</u> of October 2015 as a means of addressing the specific requirements of start-ups.

#### Have your say

With this consultation the Commission seeks views from all stakeholders - in particular from:

- Businesses, the self-employed and organisations representing businesses
- Citizens and citizen or consumer representative organisations
- Public authorities at all levels

The aim of this consultation is to seek the views of stakeholders on the identified problems and different policy options that can be pursued to address them. For further background information, please consult the <u>inception</u> <u>impact assessment</u> of the initiative.

The results of this consultation will provide valuable input to the Commission when preparing any future policy proposal and assessing the impact of different policy options.

### Participate in the consultation

This consultation will remain accessible until 21 November 2016.

Source: European Commission

# Urban adaptation to climate change in Europe 2016 -Transforming cities in a changing climate

#### EEA Report No 12/2016

Urban adaptation to climate change in Europe 2016 Transforming cities in a changing climate



European Environment Agency

The European Environment Agency (EEA) report "Urban adaptation to climate change in Europe 2016 – transforming cities in a changing climate" builds on and complements existing products and initiatives on urban adaptation in Europe. It focuses on the state of actions in the field and progress achieved since the first EEA report in 2012, and it considers this analysis in relation to current challenges: Do existing actions lead to attractive, climate-resilient cities and if not, what needs to be changed? The report aims to broaden perspectives and provide input to a review and subsequent adjustment of urban adaptation to climate change by local governments and by supporting regional, national and European institutions, researchers and other relevant stakeholders.

For further information on the topic and for downloading the report please click <u>here</u>.

# **Upcoming Events**

# **Renovate Europe Day 2016 – 13th October 2016, Brussels**



The EU's major buildings regulations are coming under review this autumn with the Energy Efficiency Package. Let's make 2016 the year of delivery for EU jobs and growth by enshrining a long-term vision for the EU's leaky buildings in the Energy Performance of Buildings and the Energy Efficiency Directives. Contribute to the debate on how to set the EU vision to achieve Nearly Zero Energy Building (NZEB) standards by 2050 for the European building stock with the Slovak EU Presidency, key stakeholders and policy-makers at Renovate Europe Day 2016 (REDay2016).

The main topics of the conference include:

- How can we ensure that investments are made in sectors, such as construction, that are vital to relaunch growth and deliver a sustainable energy future?
- How can the EU support this key industry for the future and galvanize a new generation of SMEs that are so
  vital to the stability of the EU economy and to the wellbeing of EU citizens?
- What regulatory and financial frameworks are needed to create new market opportunities, improve skills and increase the number of quality local jobs for renovation SMEs across Europe?

The morning conference of REDay2016 will be followed by an afternoon site visit of renovation projects in the Brussels Region, in partnership with Bruxelles Environment.

For more information please click here.

# Energy Performance Contracting in Public Buildings – 15th November 2016, Esslingen am Neckar, Germany



The international conference "Energy Performance Contracting for Public Buildings" will take place on 15 November 2016 in Esslingen am Neckar, Germany. Representatives of public authorities, national and regional decision makers, organisations, municipalities, facilitators, interested Small and Medium-sized Enterprises (SMEs), contractors, and other stakeholders are invited to delve into different aspects of Energy Performance Contracting (EPC) and learn more from speakers with perspectives in various EPC business models.

The event offers a number of diverse presentations. Accomplished experts will present their knowledge of the subject matter and hold discussions with the audience in four workshops. The panellists will also talk about their different approaches for the most effective use of EPC in Europe's public buildings.

The event also serves as an opportunity to meet EPC experts from municipalities, and experienced facilitators, as well as to create new contacts and promote new business opportunities.

For further information, please visit the event's website at the link here.

The 9th International Conference on Bridges in Danube Basin — New trends in bridge engineering and efficient solution for large and medium span bridges - 30 September — 1 October 2016, Zilina, Slovakia



The Danube River is an international waterway flowing 2860 km across Europe from the heights of the Black Forest (Schwarzwald) down to the Black Sea delta. In its passage, the second longest European river crosses 22 geographical meridians, joining 10 countries: Germany, Austria, Slovakia, Hungary, Croatia, Serbia, Romania, Bulgaria, Moldova and Ukraine. The Danube drainage basin extends into nine more countries.

The International Conference on Bridges in Danube Basin has become a traditional international event in bridge engineering, initiated by Prof. Miklos Ivanyi and organized periodically each third year in different Danube countries: 1992 on a ship, sailing on the Danube from Vienna via Bratislava to Budapest, 1995 in Bucharest, 1998 in Regensburg, 2001 in Bratislava, 2004 in Novi Sad, 2007 in Budapest, 2010 in Sofia and 2013 in Timisoara and Belgrade. The Ninth International Conference on Bridges in Danube Basin takes place in Žilina in September 2016, aiming to analyse present trends in bridge construction in every Danube country.

The general goal of the Conference is the overall exchange of knowledge and experience between different institutions, owners, contractors, bridge designers and constructors, as well as scientific experts. The selected papers to be presented at the Conference are mainly related to the bridges across the Danube and its tributaries, i.e. to the bridges in Danube Basin. The Conference also aims to promote advances in bridge engineering.

For further information about the Conference please visit the website here.

# 5th International Symposium on Life — Cycle Civil Engineering — 16 - 19 October, Delft, the Netherlands



Life-cycle civil engineering is of great significance to society. After a period of industrialization in the past century with huge developments of all sorts of infrastructure networks and large scale construction projects, society now faces new challenges. Economies have become largely dependent on these civil assets. But society is constantly changing and the existing built environment is getting obsolete. Technically and functionally ageing assets create risks to society. Also the environmental impact of our built environment becomes a major concern. At the same time cultural heritage needs to be preserved. Action is needed to preserve the environment for the next generations. Life-cycle thinking is

important for all partners in both construction and maintenance processes. Life-cycle civil engineering is a topic where academics and practitioners need to take steps forward.

We are challenged to develop new services and technologies that help us to deal with today's and tomorrow's challenges. The Fifth International Symposium on Life -Cycle Civil Engineering, IALCCE2016, brings world experts together, to share recent progress and formulate future directions to life-cycle civil engineering.

The Fifth International Symposium on Life-Cycle Civil Engineering (IALCCE2016) has been organized on behalf of the IALCCE under the auspices of InfraQuest. InfraQuest is a collaboration between the Delft University of Technology, TNO (the Netherlands Organization for Applied Scientific Research) and Rijkswaterstaat (government agency within the Dutch Ministry of Infrastructure and the Environment). Within InfraQuest, the partners work together on scientific and societal relevant civil engineering topics. Each partner has its important role in the collaboration. This builds a strong connection between fundamental research, applied research and practical experience. InfraQuest works in close cooperation with the Dutch industry and national and international research initiatives, with a focus on the whole life-cycle of the assets.

#### IALCCE2016 theme: Civil engineering from a life-cycle perspective

The recent economic crisis led to new perspectives on society. It has shown the world that short-term thinking does not serve society in a proper way. Meanwhile, society is facing the effects of short-term thinking in the past, ranging

from climate change, pollution to social impacts. Life-cycle thinking and the strive towards a circular economy, are the new ways to go and will necessarily lead to a paradigm-shift in view of creating a sustainable society.

Civil engineering is traditionally focused on construction. New societal needs force us to look in a different way at civil engineering. Civil engineers are now faced with new challenges, like ageing infrastructure and buildings and a strong demand to reduce the impact of activities related to structures and infrastructures on the environment.

Creating a sustainable society is a challenge relevant to the whole civil engineering sector. This is why the theme of the conference is: Civil engineering from a life-cycle perspective. All delegates are challenged to bring in their solutions to create a sustainable future. The symposium will devote special attention to meet the following four objectives: (a) better control on asset performance over the life-cycle; (b) better value over the life-cycle; (c) in control of asset-related risks; and (d) reducing the environmental impact to society. These four objectives do not replace the general IALCCE themes. Nevertheless, we would like the participants to pay attention to the relevance of these objectives. Contributions focusing on at least one of these objectives are particularly welcome.

The proceedings of the symposium will consist of a book of extended abstracts and a DVD with full length papers published by CRC Press/Balkema (Taylor & Francis Group).

For further information about this event please visit the website here.





European Council of Civil Engineers

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"Civil Engineers at the Heart of Society Building Life Quality and a Sustainable Environment" The European Council of Civil Engineers (ECCE) was created in 1985 out of the common concern of the professional bodies for Civil Engineers in Europe that the Civil Engineers working together across Europe could offer much more to assist Europe advance its built Environment and protect the natural environment.

At the European Union level, ECCE aims to promote the highest technical and ethical standards, to provide a source of impartial advice, and promote co-operation with other pan-European organizations in the construction industry. ECCE also advises and influences individual governments and professional institutions, formulates standards and achieves a mutual compatibility of different regulations controlling the profession, and formulates standards for a European Code of Conduct of the Civil Engineering Profession and disciplinary procedures applicable throughout the Union.