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Let us reinvent the energy sector

The Energy Strategy 2050 of the confederation; cantonal model regulations; 2000-watt-society; energy cities; and communal energy planning are just some of today's known energy policy developments. In parallel to these, the intentions for opening up the electricity market, and recently the natural gas market, are ongoing.

One of the reasons for opening the market – especially the electricity market – can be found in the intend to harmonise policies with the EU (i.e. bilateral electricity agreement). Another important reason is that the energy costs represent a competitive factor for our industry and commerce. Normally, market liberalisation is associated with a gain of efficiency and attractiveness of the market. The best example being the telecommunications market. However, contrary to the telecommunications market, the customer of energy products may not be motivated to consume the maximum amount of the products. The fundamental principle here is: "The best energy is the energy not used".

Kurt Lüscher

CEO Energie 360°

iimt Lecturer in Strategy & Innovation Management

Read more about "Let us reinvent the energy sector" on page 7

Save the date!

Next Masterclass	17.09.2014
Social & Fun Event	04.10.2014
Leaders Launch	28.11.2014

Thank you Prof. Dr. Göran Andersson!

Since 2006, Prof. Dr. Göran Andersson was active as Subject Area Coordinator (SAC) and responsible for the iimt "Utility Technology" course, together with Prof. Hubert Sauvain. Coming from Sweden, he is a Professor in Power Systems Laboratory at the Swiss federal Institute of Technology Zurich (ETHZ). He resigned from his position after several years as Subject Area Coordinator.



The iimt and all its staff members would like to thank Prof. Dr. Andersson for his commitment in the past years and wish him all the best for his future.

SCNG at the iimt

On the 21st of August, the iimt welcomed members of the Swiss Cooperate Network Group for a one-day meeting to exchange insights about the topic "Change Leadership: how to move up the PMO maturity curve". The lively discussion concluded that support from top management, and a long-term approach are the most important factors to improve this maturity. Finally, the members were highly pleased by the event organisation which resulted in a successful day.



skyguide IMT Programme

skyguide – the provider of civil and military air navigation services in Switzerland – has chosen the iimt for teaching a part of their further education training to their employees.

For two days in September and two days in October, three iimt lecturers will share their know-how with 20 managers. The first day will concentrate on the subject area "Strategy", the second day on "Economics & Finance". In October the lecturers will introduce the participants to the subject areas of "Organisational Behavior" and "Change Management". The courses will be given in English and will be conducted in Biel and Spiez (canton of Bern).

This cooperation was initiated by Prof. Dr. Zaugg, who is a former lecturer of the iimt. Once again this shows how strong the connection between the members of the iimt world (lecturers, alumni & students) is and how valuable the exchange of experience can be.

The iimt is really proud to cooperate with skyguide and is looking forward to welcoming the members of skyguide to the iimt world.



ARES Conference at iimt

The iimt is proud to announce that the 9th International Conference on Availability, Reliability and Security (ARES) will be hosted at the iimt - University of Fribourg, from the 8th till the 12th of September 2014. The main focus of the ARES conference is to highlight the various aspects of security, with special focus on the crucial linkage between availability, reliability and security.

The aim is to provide a platform where a comprehensive discussion regarding the research issues around viewing security as an integrative concept that covers, amongst others, availability, safety, confidentiality, integrity, maintainability and security in the different fields of applications.

ARES emphasises the interplay between the fundamental and practical issues of security in emerging areas such as e-government, m-government, location-based applications, ubiquitous computing, autonomous computing, etc.



New Member of the iimt institute Council and Student representative



Mr. Stefan Kälin, HR Business Partner at T-Systems Schweiz AG as well as iimt Executive MBA student, is a new member of the iimt Institute Council. Mr. Kälin is taking over the role as students' representative. He is

successor who completed his EMBA in 2013. The iimt and all the members of the iimt Institute Council are looking forward to the fruitful collaboration and would like to thank Mr. Kälin for his valuable support.

Thank you Claude-Alain Vannay!

Mr. Claude-Alain Vannay was an active member of the iimt Institute Council since 2011. He completed his EMBA study programme in 2013, and hands on the torch as students' representative to Mr. Stefan Kälin.

All members of the Council and the iimt management would like to warmly thank Mr. Vannay for his commitment, and wish him all the best for his future.



NEXT COURSES

Next Courses in September

In September 2014 we will again offer courses with interesting personalities from the industry and academic world.

Reach your objectives while taking into account the financial, legal and technical constraints in the energy sector.

Get closer to the ICT Technology and its multidisciplinary aspects while considering information security. Learn how a company communicates, or, perhaps your interests lie in Information Management & Decision Support?

Corporate Communication

23rd - 24th September

Corporate communication and stakeholder management; Corporate identity, image and reputation; Communication strategy and practice incl. media relations; Crisis management

International Speaker:

- Dr. Graeme Lindsay, Amiens School of Management, France



Utility Technology

Module 1: 9th - 10th September

The electricity sector - open market, strategy and positioning; CO₂ trading; The distribution company (design, reliability analysis/power quality, metering, cost over outage time, pricing, sales); Asset management

Module 2: 16th - 17th September

Congestion management: power flow control and economics, social welfare; Market coupling; reliability and investment optimisation; Environment issues

Speakers:

- Prof. Patrick Favre-Perrod, University of Applied Sciences, Fribourg
- Dr. Thilo Krause, ETH, Zurich
- Dr. Lukas Küng, ewz AG, Zurich
- Dr. Markus Leuzinger, Busarello+Cott+Partner AG, Küsnacht ZH
- Dr. David Orzan, The Energy Consulting Group Ltd, Zurich
- Dr. Dieter Reichelt, Axpo AG, Baden

International Speaker:

- Dr. Stefan Ulreich, EON AG, Germany

Information and Communication Technology

Module 1: 9th - 10th September

Telecom: infrastructure, economics, trends; Green IT; Advanced and multimodal user interfaces; IT networks: threats and trends; Securing the network; IT and sustainable development; Sustainability reporting in the IT sector

Module 2: 16th - 17th September

From strategy to budgeting; Management control systems; Performance measurement

Speakers:

- Dr. Wolfgang Lohmann
- Dr. Elena Mugellini, University of Applied Sciences, Fribourg
- Walter Steinlin, Swisscom (Schweiz) AG and CTI/KTI, Bern
- Prof. Dr. Ulrich Ultes-Nitsche, University of Fribourg

International Speaker:

- James Greene, Rescop, Germany
- Mrs. Jutta Jerlich, Cisco and Vienna University of Technology, Austria



NEXT COURSES

Information Management and Decision Support

Module 1: 11th - 12th September

The role of IT: its importance for corporate strategy; Fundamentals of information management; IT-governance, IS-controlling and risk Management

Module 2: 18th - 19th September

Implementing information system in organisations; Effecting organisational change; International IT implementation; IT service management

Module 1: 25th - 26th September

Business analytics; Data warehousing; MicroStrategy; Fuzzy data warehousing; Big data; NoSQL databases; Neo4j graph database; Hadoop

Speakers:

- Dr. Daniel Fasel, Scigility AG, Fribourg
- Prof. Dr. Philippe Cudre-Mauroux, eXascale Infolab, Fribourg
- Prof. Dr. Stephanie Teufel, University of Fribourg

- Prof. Dr. Andreas Meier, University of Fribourg
supported by: Aleksandar Drobnjak and Marcel Wehrle

International Speakers:

- Prof. Dr. Tilo Böhmman, University of Hamburg, Germany
- Prof. Dr. Helmut Krcmar, Technical University Munich, Germany

Next Courses in November

In November, we will have our last course weeks of the year.

Get familiar with the fundamentals of law, and take part of this interactive course. Discover the drivers for competition and competitiveness with the course on National & International Economics; this course is based on the classes of the famous Prof. M. E. Porter.

Lead a project to success and learn why projects are essential to achieve the companies' strategies with the Project Management course.

Law in ICT & Utility Management

Module 1: 6th - 7th November

Fundamentals of Law; Concepts in various Fields of Law; Telecommunication Law; Administrative Law; Labour Law and Private Law; Contracts; Public Law; Energy Regulation Law; Concession for Hydropower and Distribution Grid

Module 2: 13th - 14th November

Commercial, Company, Electronic Commerce & Telecommunication Law; Contract Negotiations; Competition Law; Cooperation, take over, mergers of utilities

Speakers:

- Mrs Juliette Ancelle, id est avocats, Lausanne

- Mrs Emilie Conti, Waeber Membrez Bruchez Maugué Avocats, Geneva
- Mrs Stéphanie Feinberg, University of Fribourg
- Prof. Dr. Clémence Grisel, University of Fribourg
- Prof. Dr. Michel Heinzmann, University of Fribourg
- Dr. Nicolas lnyedjian, Froriep Renggli, Zurich
- Dr. Michel Jaccard, id est avocats, Lausanne
- Dr. Nicolas Kuonen, Ducrest Heggli Avocats LLC and University of Fribourg
- Dr. Sylvain Métille, BCCC Attorneys-at-Law
- Mr. Klaus Neff, VISCHER AG, Basel



NEXT COURSES

National & International Economics

Module 1: 4th - 5th November

Competition policy

Anti-trust and regulation:
Anti-competitive behaviours;
Regulation, deregulation,
privatisations; Regulation of
Network Industries

Module 2: 11th - 12th November

Microeconomics of Competitiveness (MOC) in cooperation with Harvard Business School

Driver and strategies:
Determinants of competitiveness
viewed from a bottom-up,
micro-economic perspective;
Role of clusters; Role of private
and public sector; Special issues
of competitiveness (the Role of
Asia)

The MOC course has been created
in a multiyear development effort
by Prof. Porter of the Institute for
Strategy and Competitiveness at
Harvard Business School (USA).
The vision of the course is to
make a meaningful impact on
the economic competitiveness
and prosperity of the regions and
countries in which it is taught.

Speaker:

- Prof. Dr. Philippe Gugler,
University of Fribourg

Lectures via videotapes:

- Prof. Michael Porter,
Harvard Business School
& the Bishop William
Lawrence University, UK

Project Management

18th - 21st November

A structured and global
experience: Understand why
projects are essential to achieve
a companies' strategies;
Discuss how international
companies can increase project
management competencies;
Learn about the PMI framework
(PMBOK® Guide) and Agile
principles; Learn and practice
the project life-cycle: Initiate,
Plan, Execute, Monitor &
Control and Close; Define
your own agile framework
to manage global projects;
Simulate virtual teamwork
through workshop and
brainstormings

Speakers:

- Mrs Sarianna Benain,
SITA, Geneva
- Mr. Jean Binder,
Global Project
Management.org,
Switzerland
- Prof. Dr. Stephanie Teufel,
Director of the iimt,
University of Fribourg

For further information do not hesitate to contact us or visit
our website www.iimt.ch

Course fee:

CHF 1'400.- (for 1 module)

CHF 2'800.- (for 2 modules)

CHF 4'200.- (for 3 modules)

Location: iimt, University of Fribourg

Course language: English

Registration: Download the application form on the iimt
website, or contact us

With the successful completion of a course, it is possible to
credit the modules towards a future Executive MBA, DAS or
CAS in ICT or Utility Management.

EXECUTIVE PROGRAMMES

Let us reinvent the energy sector (continues from the editorial)

It looks a little different with the future oriented and environment friendly (if possible, CO2-neutral) renewable energies. These energies need cheap transport systems should they be produced centrally. But generally new trends will be applied for environment friendly energy systems: Extensive system boundaries (integrated approach), the increased importance of decentralised production, ecological and economical reasonable solutions, intelligent systems and transport grids (smart grids), the latest building technology, and general technical innovations. The latter, most of the time, in combination with Information and Communication Technology (ICT) will result in new Smart Energy Services.

Both, the market liberalisation in the electricity and natural gas sector, as well as new developments in regards to the convergence of network infrastructure and complexity of decentralised systems, will bring new challenges and chances for companies and their employees. New business models and products must be developed, and existing functions will have to be fulfilled under efficient and economic criteria. In the energy sector, new jobs that include the special fields of energy management, ICT and business administration will be created.

The iimt is excellently positioned to set a course. With its own further education or with the support within partner organisations through educational programmes.

The energy sector must be reinvented. Isn't it a wonderful opportunity? Let us tackle it.

About Energie 360°

Energie 360° offers besides the natural gas also renewable energy and innovative energy services. Customers have the advantage to benefit from a large portfolio of customised energy solutions from one source.

The offer for renewable energy is expanded continuously and includes besides biogas also wood pelles and geothermal energy. With energy contracting, Energie 360° offers customised ecological and economical reasonable heating solutions.

The vision of Energie 360°

«In the year 2023 Energie 360° is the leading provider of environmentally sensible heat solutions in Switzerland.»



Kurt Lüscher
CEO Energie 360°
iimt Lecturer in Strategy & Innovation Management

energie360°



EVENTS

Social & Fun Event - 4th October 2014



Discover the butterfly effect!

This year, the iimt-world members will have the unique opportunity to discover how ecology can rhyme with pleasure, without any constraint or guilt. You will be a direct actor in sustainable energy.

After a guided tour in Fribourg aboard a touristic train, we will visit the exhibition "L'Oracle du papillon". This revolutionary and

interactive exhibition highlights by mixing art, technology and science-how the climate changes on our planet and invites you to experience them from different angles. This guided tour is in German or French; special activities for childrens are available.

Fancy lights and sounds that will leave none of us indifferent!



Programme

Saturday 4th October

- 12.30 Welcome & Guest arrival
- 13.00 Departure Tiny Train
- 15.00 Visit "L'Oracle du papillon"
- 16.30 Aperitif

Registration

For administrative reasons, we kindly ask you to register for this event (www.iimt.ch).

Attendance Fee

For this event a contribution towards expenses of CHF 10.- (per Person) will apply. The attendance fee is payable upon arrival.

Important to know

The event will take place under all weather conditions. The Tiny Train has protection in case of rain and the exhibition is indoors. Children from any age can attend the programme; they will have a special animation in the exhibition, so that everybody can enjoy the visit.

Meeting Point

The meeting point is at 12.30 at Place Jean Tinguely 1, in front of the Theater Equilibre. It is only a 5min walk from the train station.



EVENTS

Masterclass - 17th September 2014

Sun and Wind: Mastering the change in the grid

How Europe's electric infrastructure copes with new challenges

Electricity plays a vital role in our daily routine and accompanies us throughout our lives. It is the electric grid that transports this essential good to every household. The grids challenges, whose vast parts were built and designed mostly in the 1950s and 1960s, have undergone drastic changes in recent years. The grid was designed to ensure steady production of large, centralised power plants. More and more it has to absorb massive amounts of energy supplied by non-projectable, decentralised producers such as wind farms and solar panels. The grid has to adjust quickly to those changes while on the other hand new power lines take years to build. There is no way around

thorough modernisation of the infrastructure, the need for better technical and operational solutions to extract the maximum out of the infrastructure. In order to keep supply stable and without interruption, the electricity system further needs a market environment that encourages a more efficient use of limited transport capacity and a smart demand and production behaviour.

This lecture will give an insight into the challenges of a changing energy world. It will also provide hints on how market-oriented solutions as well as operational tweaks and twists can help to solve problems of a constrained energy infrastructure in a fast changing environment.

Take advantage of this free Masterclass event with our top speaker Pierre-Alain Graf, CEO Swissgrid AG, and meet other professionals attending!

The iimt Masterclass will take place on the 17th of September at the iimt - University of Fribourg (Room A230). For further details, please check our website. The presentation starts at 17:00 until 18:00, and is followed by an aperitif. The participation is free of charge, registration is required.

The last iimt Masterclass of the year will take place on the 20th of November, and will be about "Social Collaboration in Project Management". Keep updated and check the iimt website.

Leaders Launch - 28th November 2014

Energy turnaround: What about Switzerland's pioneer role?

The iimt Award ceremony 2014 - Leaders Launch: Talk & Dine Event - will take place on Friday 28th November at the University of Fribourg. The programme starts at 13:30 with our annual Award ceremony where our graduate students will receive their degrees. The ceremony will be followed by an exciting panel discussion around the topic "Energy turnaround: What about Switzerland's pioneer role?".

Save the date and become part of a unique gathering, full of interesting discussions and amazing people in a great atmosphere.



Cyber Risk competence build-up: Competences and best practices for SME's and large companies

The infrastructural importance of Information and Communication Technologies (ICT) are taking on the same significance as, for example power grids or transport systems; both in the private and the economic sector. Production, trade, service or education and training are no longer conceivable without ICT. Figure 1 shows the saturation level of ICT infrastructure for Swiss companies. [1].

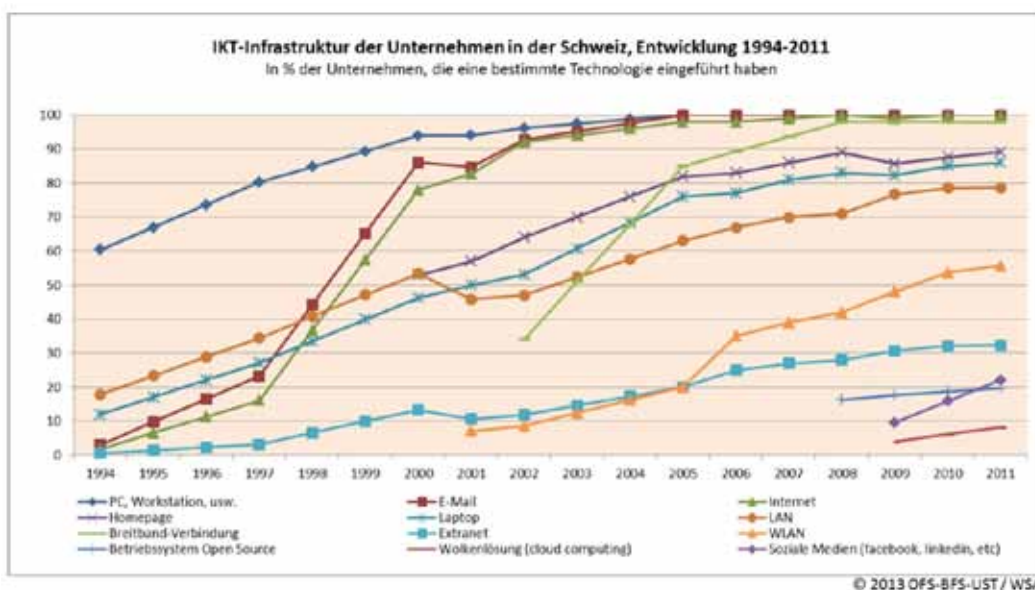


Figure 1: Development of the Swiss ICT-infrastructure

Accordingly, special interest is being shown towards the protection of the information and communication infrastructure and the prevention of cyber risks is of national interest. Therefore, the Federal Council has mandated a national strategy to protect Switzerland against cyber risks. The following strategic objectives are pursued [2]:

- Early identification of threats and dangers in the cyber field
- Improvement of the resilience of critical infrastructure
- Effective reduction of cyber risks, especially cyber-crime and cyber sabotage.

The sensitisation of stakeholders from business, society and the general authorities, with regard to cyber risks is an essential prerequisite to sure that the appropriate measures for risk minimization are taken. It is thus a key factor in risk management. This requires a defined target audience with specific base and core competencies for dealing with cyber risks, as well as, best practice examples. The prerequisite is the identification and specification of the target groups.

The iimt was commissioned by the Federal Office of Communications (OFCOM) to participate in the sphere of action "competence building", measure 7. The commissioned study pursues three objectives: i) the target group economy is refined in order to identify experts and hence best practices out of the individual segmentation levels; ii) adequate criteria are established for the identification of best practices; iii) in a non-representative short survey, a first impression is given in terms of raising awareness of cyber risks in the target group economy.

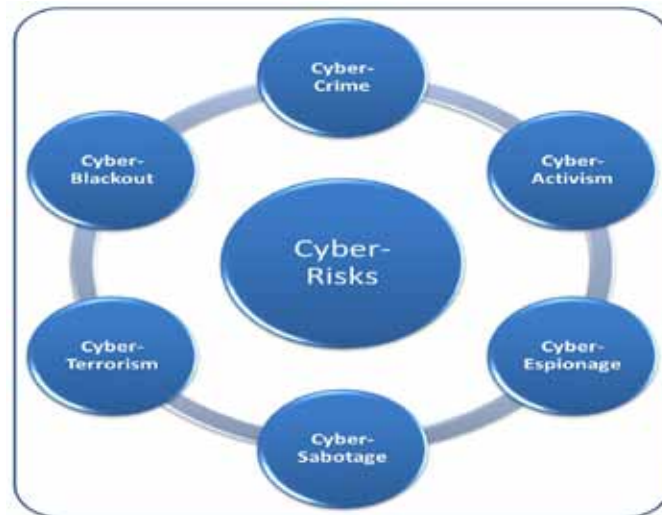


Figure 2: Cyber-Risks

Generally, cyber risk is composed of several different types of risks associated with Information & Communication Technologies (ICT), as shown in Figure 2. Therefore, cyber risk does not refer to one specific risk, but rather to a group of risks that are composed of the different technologies, attack profiles, as well as uncontrollable, external circumstances.

Thus, risk disclosures should not only consider criminal activities, but should also include natural disasters. Accordingly, a distinction is made between defence methods and methods of protection. The study focuses in particular on the criminal aspects of cyber risks.

For the examination of the target group economy, all non-agricultural, market-based Swiss companies of the secondary sector (industry) as well as the tertiary sector (services) are considered. Operators of critical infrastructures (CI) are excluded.

A three-stage segmentation is recommended: i) business sectors; ii) degree of communication respectively interaction; and iii) strategic market positioning. The categorisation of cyber risks along with the segmentation of the target group economy forms from a company's perspective, the entry point for the retrieval of identified best practices. Additional criteria for best practices are shown in the final report.

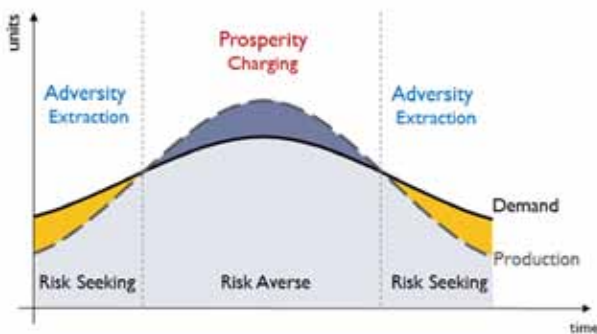
The conducted survey is explicitly non-representative. It just shows trends and generates a deeper understanding. The interviews were conducted as semi-structured guided interviews. The interviewees were determined according to the previously introduced segmentation. The tendency was identified that a general awareness of the dangerous situation exists. Knowledge of training measures and especially their application seems to be rather below average.

[1] Bundesamt für Statistik, "Informationsgesellschaft - Indikatoren: Unternehmen - IKT-Infrastruktur," 2013. [Online]. Available: http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.indicator.30201.302.html. [Accessed 26 March 2014].

[2] Federal Department of Defence, Civil Protection and Sport DDPS, "National strategy for the protection of Switzerland against cyber risks," 19 06 2012. [Online]. Available: <http://www.isb.admin.ch/themen/strategien/01583/index.html?lang=en>. [Accessed 19 06 2014].

Chair's Publications in the field of Management of Energy Systems

A highly acclaimed contribution titled "**The Changing Decision Patterns of the Consumer in a Decentralized Smart Grid**" was presented by Mario Gstrein at the *11th International Conference on the European Energy Market 2014 (EEM14)*, Krakow, Poland. The conference is supported among others by IEEE and PES. In the paper an essential decision-making pattern of consumers is defined on the basis of the potential of self-generated and self-stored electricity (PV without immediate feed-in). Thus, the prosumer is given a creative leeway in dealing with electricity. This means that in times of energy surplus the prosumer is risk averse in his decisions while during the off-peak times he acts in a risk-seeking manner.



The talk has met wide approval and led to good discussions. It was identified that the branch has achieved much progress and is on a good way to realize a Smart Grid. Nevertheless, the discussions and talks have shown that the issue of "Consumer" and the integration in the added value still raises many questions and ambiguities exist.

Furthermore, Professor Dr Stephanie Teufel will present at *ICSGCE2014 conference (4th International Conference on Smart Grid and Clean Energy Technologies)* in Dubai, UAE, her position paper "**The Crowd Energy Concept**". The conference is supported among others by China Renewable Energy Society (CRES), and China Energy Association (CEA). In this paper the effects of Fukushima and the associated new energy policy in Switzerland and Europe are presented. The focus is on renewable energy and consequently on decentralization. Decentralized generation, storage and, needless to say, consumption are the central points. It is shown that the, technically possible, decentralization shifts the role of the consumer to an energy-prosumer. Thus, it is derived that not only the technical but also a sociotechnological dimension has to be considered. This is the basis of the introduced Crowd Energy Concept.

The results and developments which are produced at the chair's research field Management of Energy Systems are also a subject of a Keynote speech, which Professor Teufel is going to hold at the *7th International Conference on Computer and Electrical Engineering (ICCEE 2014)*. The title of the speech will be "**Decentralization and Energy-Prosumers**".

M. Gstrein and S. Teufel, „The Changing Decision Patterns of the Consumer in a Decentralized Smart Grid,“ Proc. 11th Int. Conference on the European Energy Market (EEM14), Krakow, Poland, 2014.

S. Teufel and B. Teufel, „The Crowd Energy Concept“, Proc. 4th International Conference on Smart Grid and Clean Energy Technologies (ICSGCE2014), Dubai, UAE, 2014.

ideas@iimt is ready to take off!



In September, the iimt offers its students the possibility to realise their own (business) ideas. Up until now, creative students could only talking about their ideas, receiving input during coffee breaks or short consultation hours without being able to take it further. Now, with the establishment of "ideas@iimt", students can receive a working place, time, resources, coaching and a network with competent partners and coaches to develop and create their own ideas. The concept behind this program was to develop and conform to other incubators, associations and promotion-platforms during this summer. With its easy access for entrepreneurial students, "ideas@iimt" will bridge a gap in the promotion of innovation strategy within the Canton of Fribourg.



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Our first ideas@iimt-nominee was Mr. Philipp Zimmer, who has developed a marketing concept for gyms, called "Fitcoins". This concepts allows gym participants to produce energy while exercising (such as cycling, rowing etc.), which could cover a part of the energy requirement of the gym. These participants would collect Fitcoins for their efforts, and can utilise them as recompensed in the form of bonuses. With the generous support of Mr. André Rotzetta (Professor at The College of Engineering and Architecture of Fribourg) and his team, the first prototype has already been fabricated and will be presented/tested by Philipp within the university.

Our second ideas@iimt-nominee is Andrea Baumann, who conceptualised an "E-Fashion App" that links the weather forecast with your personal agenda and recommends appropriate clothes for different occasions. At the moment, Andrea is analysing her Business Model and the technical feasibility. "ideas@iimt" connected her with Mr. Christian Sauter, who is an executive board member at Excelsis and an experienced expert in the domain of Mobile Apps. This relationship has helped to accelerated Andrea's work.

Should you wish to have any additional information regarding the students ideas, "ideas@iimt" or sponsoring opportunities, don't hesitate to contact us: ideas@iimt.ch



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Bring in offer: Last chance to participate

Recommend us against remuneration: Share your experience!

Do you know someone who is interested in further education? Then share your experience and recommend us against remuneration! The iimt offers current iimt students, graduates and lecturers the opportunity of actively promoting further education. Recommend the iimt programmes to your friends, colleagues, family or anybody else; for each new student who enrolls for one of the iimt Executive Programmes (Executive MBA, Executive Diploma or Executive Certificate), you will receive a remuneration in return. The bring in offer is valid until the 31.12.2014.



Did you know?

On the 13th of July 2014, Germany was crowned in football world's championship for the fourth time (also in 1954, 1974 and 1990). But Germany isn't only good in football, but also...

in generating up to 74% of their power requirements from renewable energy with wind and solar in particular filling such a huge portion of the country's power demand. This record was reached mid of May 2014. Observers say the records will keep coming as Germany continues its Energiewende, or energy turnaround, which aims to power the country almost entirely on renewable sources by 2050.

by producing more than half of their electricity from solar panels in the first two weeks of June 2014, which allowed

Germany to break the energy records. On the morning of the 9th June 2014, generation peaked at 23.1 gigawatts per hour, 50.6 percent of the country's requirement. One megawatt is enough to fulfil the needs of 2,000 households.

in showing off their artistic and creative side by winning in several categories the World Beard and Moustache Championships.

Wolfgang Schneider (Natural Moustaches), Karl-Heinz Hille (Partial Beards Imperial), Dieter Besuch (Partial Beards Freestyle) and Elmar Weisser (Full Beards Freestyle), to name just a few, had some winning "hairbrained" displays.

Sources:
www.thinkprogress.org/climate
www.europeanceo.com
www.worldbeardchampionships.com



Elmar Weisser



Dieter Besuch