

SIEnergyLab - Bridging Science & Business in ICT & Energy for a Sustainable Society

SIEnergyLab seeks to bundle the forces of complementary scientific research and brings business and science together in the field of Sustainable ICT & Energy. Under the supervision of Prime Minister Mark Rutte (the Netherlands), Minister-President Kris Peeters (Flanders) and Jose Romano representing Governor Rick Perry (Texas), the Memorandum of Understanding between the University of Texas (Texas), Energyville (Flanders) and SIEnergyLab (the Netherlands) was signed on July 8th 2013 in Houston, Texas.

The key factor in the transition to a sustainable society is to apply ICT to solve the energy challenges that we are facing. These challenges cannot be solved by occasionally collaborating on projects between science and business. What is needed, is to create structural synergy between science and business. By nature, science and business tackle issues from different perspectives. By combining these different perspectives structurally and continuously, a new, powerful potential is unleashed. This is why SIEnergyLab aims to form a structural bridge between science and business to apply ICT to monitor and control energy production, distribution and consumption in a better way in order to work towards a sustainable society. In SIEnergyLab, representatives from science and business collaborate to create solutions that are solid, innovative and applicable in practice. At the (inter) national level SIEnergyLab seeks to bundle the forces of complementary scientific research and brings together members of the participating companies with scientific expertise in the field of Sustainable ICT & Energy.

The SIEnergyLab organization performs knowledge commercialization (valorisation): initiating, promoting and carrying out scientific research in above mentioned fields for commercially viable and socially thoughtful applications, taking into account those issues that are important for end users, e.g. convenience, trust, enjoyment and gain. Going beyond the standard unidirectional knowledge commercialization, SIEnergyLab initiates structural, close interaction between business and science in order to create the right level of synergy to produce new knowledge with 'built-in' valorisation. In this way, SIEnergyLab seeks for advanced technological solutions to ICT & Energy related urgent issues, consciously considering social and human impact.

National and International Cooperation
SIEnergyLab has been initiated by GreenICT Foundation and Radboud University Nijmegen to join forces nationally. Starting from this Dutch perspective and being aware of the fact

that the world is further developing into a global village, international cooperation is a natural next step. On July 8th 2013 the Memorandum of Understanding between the University of Texas at Austin (Texas), Energyville (Flanders) and SIEnergyLab (the Netherlands) was signed in Houston, Texas. The University of Texas was represented by Dr. Thomas Edgar, Prof. Dr. Ir. Ronnie Belmans represented Energyville while SIEnergyLab was represented by Prof. Dr. Ir. Ton Backx.

Both the University of Texas and Energyville are interesting R&D partners. For instance, the University of Texas Systems covers nine universities, including the University of Texas at Austin, which educate more than 216,000 students and employ 87,000 faculty and staff members. Energyville is a Flemish cooperation including VITO, KU Leuven and Imec., among others.

Prior to signing this Memorandum of Understanding (MoU) for international cooperation, another MoU, the SIEnergyLab Memorandum of Understanding was signed. The SIEnergyLab Memorandum of Understanding was signed in the first week of July, 2013. The parties involved in the SIEnergyLab MoU are Radboud University Nijmegen, GreenICT Foundation, Delft University of Technology, Eindhoven University of Technology, IIP Sustainable ICT Foundation - Platform for Sustainable ICT, Alliander and the University of Twente.

The SIEnergyLab Memorandum of Understanding was signed by Prof. Dr. Tom

Heskes, Director Institute for Computing and Information Sciences - Radboud University Nijmegen, Roel Croes LL.M, co-founder and board member - GreenICT Foundation, Prof. Dr. Ir. Rob Fastenau, Dean Faculty Electrical Engineering, Mathematics and Computer Science - Delft University of Technology, Prof. Dr. Ir. Ton Backx, Dean Faculty Electrical Engineering - Eindhoven University of Technology, Prof. Ir. Ton Koonen, Chairman - IIP Sustainable ICT Foundation, Bram Reinders MSc, Manager Alliance Management - Alliander and Prof. Dr. Ir. Ton Mouthaan, Dean Faculty Electrical Engineering, Mathematics and Computer Science - University of Twente.

Besides these MoU signing partners, many (scientific) organizations have indicated interest to join and support the SIEnergyLab initiative. The will to invest in a sustainable future is actually, only a matter of (scientific) common sense. SIEnergyLab is striving after this common interest.

SIEnergyLab Goals

The objectives of SIEnergyLab are acquiring new knowledge in synergy and strengthening the knowledge economy. Research in this field is critical to progress, as is sharing such research and innovative developments. This is why this twofold goal forms the foundation on which SIEnergyLab bases its objectives.



Roel Croes (SIEnergyLab co-founder & board member) and Mark Rutte - Prime Minister of the Netherlands. Houston, July 8th 2013. Picture taken by Melanie Schultz van Haegen - Minister of Infrastructure and the Environment of the Netherlands.

Acquiring New Knowledge in Synergy in the Field of Sustainable ICT & Energy

SIEnergyLab fulfils this objective by realizing synergy and acquiring new knowledge through research and development. Among other factors, synergy is achieved by pooling scientific expertise in the field of sustainable ICT & Energy at an (inter)national level and improving the cooperation between science, business and government.

The acquisition of new knowledge will be realized by initiating, promoting and conducting scientific research on the aforementioned fields in favour of commercially viable and socially sophisticated applications. Of course, important issues such as the end user's convenience, pleasure and gain are taken into account. Researchers study topics and issues, which are put forward by business, using their scientific background. In addition, external project proposals related to similar research topics put forward by businesses can also be studied. For this, SIEnergyLab cooperates with leading universities and supports the integration of academic research and teaching at the universities involved.

Strengthening the Knowledge Economy in the Field of Sustainable ICT & Energy

SIEnergyLab fulfils the objective of strengthening the knowledge economy in aforementioned fields by disseminating and commercializing (valorisation of) knowledge, including by bringing to the attention of Sustainable ICT & Energy related scientific research, in business.

Besides this, the SIEnergyLab organization stimulates the commercialization of the knowledge developed, through application and implementation within the companies concerned. This results in

new propositions and business models. The visualization of the social and commercial importance of scientific research in the field of Sustainable ICT & Energy also contributes to strengthening the knowledge economy. Improving the mutual perception of science, business and government in the field of Sustainable ICT & Energy creates new opportunities for all parties involved.

Organizational Structure

SIEnergyLab is an independent public-private partnership in the field of Sustainable ICT & Energy. The organization is led by a board which consists of scientific director, Prof. Dr. Marko van Eekelen (Radboud University Nijmegen) and business director, Roel Croes LL.M (GreenICT Foundation). Both members are also the initiators of SIEnergyLab. Due to its lean and mean organizational structure, SIEnergyLab's organization is characterized

by effectiveness, efficiency and sufficient flexibility. It is therefore able to adequately react to changes in the dynamic research and development field of Sustainable ICT & Energy.

SIEnergyLab is a joint venture of leading universities, companies and NGOs such as: Eindhoven University of Technology, Radboud University Nijmegen, GreenICT Foundation, Delft University of Technology, Alliander, University of Twente and IIP Sustainable ICT Foundation - Platform for Sustainable ICT. To achieve its goals, the organization can use its own extensive network of professionals and the networks of its partners. SIEnergyLab aims to closely cooperate with its contacts in science, business, government (the Ministry of Economic Affairs, NL Agency, the Netherlands organization for scientific research NWO and Technology Foundation STW, among others) and various Top Sectors including Top Consortia for Knowledge and Innovation (TKIs): TKI Switch2SmartGrids, TKI EnerGO, TKI HTSM and TKI Biobased Economy.

SIEnergyLab is open to all parties who wish to make an active contribution to scientifically interesting and commercially viable solutions in this crucial social and technological R&D field. Further information is available via www.sienenergylab.com

SIEnergyLAB
SUSTAINABLE ICT & ENERGY RESEARCH



The launch of the Dutch portal website on Sustainable ICT & Energy

The launch of the Dutch portal website on Sustainable ICT & Energy (ICTgaatvoorgroen.nl) during the Sustainable ICT & Energy Conference An Innovative Truth V on June 19th 2013. From left to right: Ab van der Touw (CEO Siemens Netherlands NV), Mark van Stiphout (Cabinet member of Energy Commissioner Günther Oettinger, European Commission), Marcel Krom (CIO and Director International PostNL), Roel Croes (Secretary IIP Sustainable ICT Foundation) and Pier Nabuurs (Chair Top Sector Energy - until July 1st 2013) on the stage of the Beatrix Theatre in Utrecht, the Netherlands.



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Signing of the Memorandum of understanding between University of Texas (Texas) Energyville (Flanders) and SIEnergyLab (the Netherlands) by Dr. Thomas Edgar (University of Texas), Prof. Dr. Ir. Ronnie Belmans (Energyville) and Prof. Dr. Ir. Ton Backx (SIEnergyLab) on July 8th 2013 Houston Texas.

