

On 19 June 2013, the fifth edition of An Innovative Truth - Conference on Sustainable ICT & Energy will take place at the Beatrix Theatre in Utrecht, the Netherlands. An Innovative Truth V is an energizing and involvement stimulating conference on the themes of Sustainable ICT and Energy.

Following the successful conferences An Innovative Truth, An Innovative Truth II, An Innovative Truth III and An innovative Truth IV, GreenICT Foundation and IIP Duurzame ICT Foundation - Platform for Sustainable ICT organize this jubilee edition of An Innovative Truth - Sustainable ICT & Energy Conference. The programme contains, among other things, keynote presentations and workshops given by exclusively leading speakers.

An Innovative Truth V - The background

n August 2008, GreenICT Foundation and the Ministry of Economic Affairs (EL&I) took the initiative to organize an energizing conference to promote energy efficiency and sustainable ICT. This initiative resulted in four successful An Innovative Truth conferences, including contributions from the Ministry of Economic Affairs and the European Commission, on 22 June 2009, 15 September 2010, 22 June 2011 and 20 June 2012. The conference website -

aninnovativetruth.nl - provides a proper impression of these conferences regarding content, programmes, objectives and results.

The previous editions of An Innovative Truth were organized by the Ministry of Economic Affairs, the ICT Innovation Platform for Sustainable ICT (IIP Duurzame ICT Foundation) and GreenICT Foundation. They persuaded leading speakers to contribute to An Innovative Truth. In 2009 former State Secretary Frank Heemskerk and Cabinet Member Linda Mauperon, replacing EU Commissioner Vivian Reding, attended as keynote speaker. The then Director-General Energy and Telecom Mark Frequin acted as chair of the day. In 2010 Hans Vijlbrief former Director-General Energy, Telecom and Markets attended as keynote speaker. In 2012 his successor Mark Dierikx, the current Director-General ETM of the Ministry of Economic Affairs acted as keynote speakers. Partly based on the outcomes and results of previous editions, An Innovative Truth V will also be a follow-up. This conference will look back, but mostly generate new activities and partnerships.

An Innovative Truth V is a non-commercial conference. The purpose of this high level congress is to stimulate mutual cross-fertilizations between science, government and business (suppliers and users) in the area of sustainable ICT & Energy, and because of this to promote scientifically challenging and commercially interesting innovation and research. •

Launch of portal website on sustainable ICT & Energy

uring this jubilee edition of the An Innovative Truth conference, the portal website on Sustainable ICT & Energy will be launched festively in the presence of high level representatives of the four involved stakeholders groups: science, government, ICT-supplying business and ICT-applying business (the energy sector).

The portal website on Sustainable ICT & Energy derives directly from the initiative of Mark Frequin, former Director-General Energy and Telecom of the Ministry of Economic Affairs, as he plenary proposed, as chair of the conference, at the first edition of An Innovative Truth

The activities of this portal website are executed by IIP Sustainable ICT Foundation, as requested by and on behalf of the Ministry of Economic Affairs and NL Agency. On the initiative of IIP Sustainable ICT Foundation, other stakeholders groups representing parties, among others, Netherlands ICT (formerly known as ICT~Office), CIO Platform and various Top Consortia for Knowledge and Innovation (TKIs) are involved in this portal website initiative.

Mark Frequin, former Director-General Energy and Telecom of the Ministry of Economic Affairs at An Innovative Truth, 22 June 2009



The Battle - debate on sustainable ICT & Energy

he Battle is the plenary debate among representatives of science, government and business (ICT suppliers and users). During the debate these four stakeholders groups confront each other with their questions and concerns. Thoughtful and respectful, but also provocative and sharp. Each of the four stakeholders groups is represented by a spokesman.

As in previous editions of An Innovative Truth in 2009, 2010, 2011 and 2012, this year the debate will be led by Roderik van Grieken, Director of the Nederlands Debat Instituut.



Hans van der Zwaag Director ICT & Facility Services PGGM (left) and Steven Luitiens Director Logius, Ministry of Internal Affairs and Kingdom Relations (right) will attend again this year as spokesmen for their stakeholders



Debate leader Roderik van Grieken and Dr Albert Molderink during the Battle in 2012

The PhD research poster presentations

he organization of the An Innovative Truth V - conference distinguishes the societal importance of scientifically challenging and - thus applicable - commercially interesting research and innovation. Using poster presentations by PhD students, the organizers aim to bring scientific research in the field of sustainable ICT & Energy to the attention of a wider audience and, in particular, the conference attendees. For this, exhibition space is provided in the Constantijn Foyer.

PhD students engaged in research in the cross-over fields of ICT & Energy, ICT & Sustainability and Sustainable ICT are cordially invited to present their research topics and results during the conference and to discuss these with the interested audience. In line with the structure of the programme, the organization strives for a balanced and objective composition of the presented posters. Interested PhD students and professors with PhD students active in one of the above mentioned areas can contact the conference organization via the conference website aninnovative truth.nl. o

Programme

The programme includes various plenary keynote presentations, theme related workshop sessions, practical cases and a plenary debate among representatives of science, government and business. The indicative programme of An Innovative Truth V on 19 June 2013 is as

09.15 - 09.45 Welcome & information market

09.45 - 09.55 Opening by chair of the day Roderik van Grieken Director Nederlands Debat Instituut

09.55 - 10.20 Keynote speech I by Mark Van Stiphout Member of Cabinet of Günther H. Oettinger Commissioner for Energy **European Commission**

10.20 - 10.45 Keynote speech II by Ab van der Touw **CEO Siemens Nederland**

10.45 - 11.10 Keynote speech III by Marcel Krom CIO and Director International PostNL

11.10 - 11.30 Break & information market (including poster presentations by PhD students)

11.30 - 12.30 The Battle - debate among representatives of science, government and business

12.30 - 13.30 Lunch & information market (including poster presentations by PhD students)

13.30 - 14.10 Workshop sessions round I

14.10 - 14.15 Possibility to change theme room

14.15 - 14.55 Workshop sessions round II

14.55 - 15.15 Break & information market (including poster presentations by PhD students)

15.15 - 15.55 Workshop sessions round III

15.55 - 16.00 Possibility to change theme room

16.00 - 16.25 Practice makes Perfect - practical cases

16.25 - 16.30 Continuation plenary programme

16.30 - 16.55 Keynote speech IV Pier Nabuurs **Chairman Top Sector Energy**

16.55 - 17.00 Wrap-up and closure by chair of the day Roderik van Grieken

17.00 - 18.00 Networking drinks

* Because of a possible fifth keynote speaker, the programme may be subject to change. The final programme is available via the conference website.

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An Innovative Truth V

SIEnergyLab

This fifth edition of An Innovative Truth will also pay attention to SIEnergyLab. This organization for Sustainable ICT & Energy Research bridges science and business in ICT & Energy for a sustainable society. In SIEnergyLab representatives from science and business work together to create solutions that are solid, innovative and applicable. 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. For further information: SIEnergyLab.org.

The organization performs knowledge valorisation: initiating, promoting and carrying out scientific research in aforementioned 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. •

The thematic tracks

The workshop sessions are divided into four parallel thematic tracks. As with previous editions, these parallel tracks fit seamlessly with the current Top Sector policy. Three tracks are directly related to a Top Consortium for Knowledge and Innovation (TKI). Each track consists of three workshop rounds. In between these rounds attendees are offered the possibility to change tracks.

The four parallel workshop themes are:

- ICT & Energy in the built environment in cooperation with TKI EnerGO
- Smart Grids in cooperation with TKI Switch2SmartGrids
- Smart Strategy
- BioBased Economy in cooperation with TKI BioBased
 Fronomy

The thematic tracks are led by expert track leaders as prof. Wim de Ridder (Professor University of Twente) for track Smart Strategy, Frits Verheij (Director Smart Energy DNV KEMA & Chair TKI Swtch2SmartGrids, Top Sector Energy) for track Smart Grids, Teun Bokhoven (Director ConSolair & Chair TKI EnerGO, Top Sector Energy) for track ICT & Energy in the built environment and Kees de Gooijer (Director TKI BioBased Economy, Top Sector Chemistry & TKI Agri&Food) for track BioBased Economy. ◆

An Innovative Truth V - The organization

An Innovative Truth V - Sustainable ICT & Energy Conference is organized by GreenICT Foundation and IIP Duurzame ICT Foundation - Platform for Sustainable ICT in close cooperation with partners including the Ministry of Economic Affairs, Alliander, GEN, TKI Switch2SmartGrids, NL Agency, DNV KEMA, TKI BioBased Economy, Dutch-INCERT, TKI EnerGO, CIO Platform, Nederlands Debat Instituut, Nederland ICT, PGGM, NRG Magazine, Delft University of Technology, Eindhoven University of Technology, University of Twente, NWO, TNO, STW, FOM Foundation, Wageningen University and Research Centre, Siemens, Basis Bay and the European Commission.

An Innovative Truth V - Sustainable ICT & Energy Conference is initiated by GreenICT Foundation and is made possible by the financial contributions of TKI Switch2SmartGrids, GEN and Alliander.

Further information is available at aninnovativetruth.nl. •

The Conference speakers

The programme will include four plenary keynote speeches by Pier Nabuurs (Chair Top Sector Energy), Ab van der Touw (CEO Siemens Nederland N.V.), Mark van Stiphout (Member of Cabinet of European Commissioner for Energy Günther Oettinger) and Marcel Krom (CIO and Director International PostNL). The agenda also includes workshop sessions and a plenary debate among representatives of science, government and the ICT-supplying business and ICT-applying business (the energy sector).

In line with previous editions, this year all speakers and track leaders are top ambassadors for the respective themes. Speakers who already confirmed their contribution include Frits Verheij (Director Smart Energy DNV KEMA & Chairman TKI Switch2SmartGrids, Top Sector Energy), prof. Paulien Herder (Professor at Delft University of Technology & Chair Delft Energy Initiative), Kees de Gooijer (Director TKI BioBased Economy, Top Sector Chemistry & TKI Agri&Food), Bert Stuij (Manager Energy Strategy & Transition NL Agency), prof. Ton Koonen (Professor Eindhoven University of Technology), Karin Weustink (Deputy Director BioBased Economy, Ministry of Economic Affairs), Teun Bokhoven (Director ConSolair & Chair TKI EnerGO (Top Sector Energy), Steven Luitjens (Director Logius, Ministry of Internal Affairs and Kingdom Relations), prof. Henk Scholten (CEO Geodan and Professor at VU University Amsterdam), Erik van Seventer (Programme Manager BioBased Economy WUR), Lianda Sjerps-Koomen (Programme Director TKI EnerGO), Arie Brouwer (Director DPI Value Centre), Marianne Linde (Director Urban Development TNO), prof. Jan Blom (Professor emeritus at Eindhoven University of Technology), Hans van der Zwaag (Director ICT & Facility Services PGGM), Wim van Saarloos (Director FOM Foundation), prof. Wim de Ridder (Professor at University of Twente), Mira Huussen (Director New Energy Essent), prof. Jacqueline Cramer (Professor at Utrecht University & Director Utrecht Sustainability Institute) and Sam Collot d'Escury (CEO GEN). Roderik van Grieken, Director Nederlands Debat Instituut will act as conference chairman.



Peter Molengraaf (CEO Alliander), Sam Collot d'Escury (CEO GEN) and Gaston Hendriks (Principal & Co-Founder GEN) at An Innovative Truth IV; Sam Collot d'Escury, CEO GEN will be one of the leading speakers at this year's jubilee edition of An Innovative Truth.









The Need for New Technologies

f we want to have a CO₂ free energy supply in 2050, we still need to invent a lot. With only the help of existing technologies we will not manage. Even the sustainable technologies used nowadays are still too expensive. To remove CO₂ or to avoid producing it, new technologies need to be developed additionally to further cheaper deployment

of existing technologies and the realisation of a fuel shift to electricity. Also, all types of consumption of energy will have to be more efficient. This requires a huge effort in creativity, development and especially cooperation - collaboration among science, applied research, business and government, and above all, between people. An Innovative Truth brings together people who must make this happen.

Pier Nabuurs
Chairman of the Dutch Top Sector Energy



The Netherlands: Important Global Role in the Transition

Smart Grids are instrumental in the transition to a low carbon economy, facilitating demand side efficiency, increasing the share of renewables and distributed generation, and enabling electrification of transport. The Netherlands is perfectly positioned to play an important global role in

this transition because this country is home to high quality, density packed resilient electricity networks and is viewed as a testing ground for creating next generation energy infrastructures. The Dutch strong reputation in water works, gas technologies and grid technologies form the back-bone for the future electricity grid. Especially if this is properly combined with the broadband communication infrastructure and the extensive ICT-development capabilities present in this country.

High quality scientific R&D environments in combination with application driven test beds are used to analyse the impact of future demand and supply side alternatives. Not only resilience and security technologies are tested within realistic scenarios, but also peak shaving and load control. The Netherlands have created a highly deregulated market, and therefore are a breeding ground for new smart grids services and market concepts, leading to an extensive energy services based economy. For that reason, the yearly conference An Innovative Truth contributes to this country's competitive advantage by bringing the right thought leaders from government, science and the industry.

Bram Reinders

Manager Alliance Management at Alliander



The Glue that Holds Society Together

Over the past two decades, information and communications technology (ICT) has become the glue that holds our economy and our society together. Without the use of ICT, no government can function, no factory nor bank nor shop can operate, and neither goods nor passengers can be transported efficiently. ICT systems can contribute significantly to the reduction

of both the carbon emissions and electricity consumption of energy systems as well as enable the usage of renewables in the energy supply chain. For example, to meet the growing demand for energy, an intelligent and flexible grid infrastructure integrating smart generation, smart appliances and smart buildings will be essential. To achieve this, a close cooperation between universities, research institutes and industry is vital. The An Innovative Truth conferences bring together the stakeholders for this cooperation.

Gerard Smit
Professor at the University of Twente



The Sustainable Energy Carrier

Lectricity is the only energy carrier which can be converted into all other forms of energy with efficiencies close to 100%. Electricity can also be generated from almost all sustainable energy sources, like hydro, wind and solar energy generating systems. Therefore we can call electricity "the sustainable energy carrier". So it is obvious electricity is increasingly used as the energy carrier for end use applications.

To enable the large scale use of electricity from sustainable energy sources, a revolution will be needed. Up to now the generation of electricity follows the demand. In the future we will have the smart grid. The task of the smart grid is to enable the revolution where the demand of electricity will follow the generation. Besides a technical revolution this is also a social revolution since the active or passive participation of the customers is needed.

Jan Blom

Professor emeritus at Eindhoven University of Technology

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