

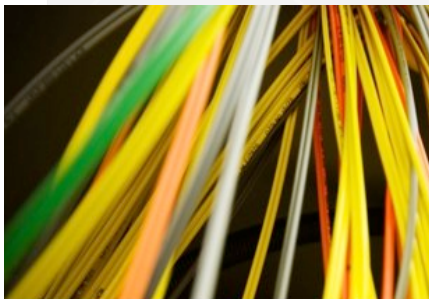


GreenITNet Good Practice: Amsterdam Region - Green IT Energy Solutions



The metropolitan area of Amsterdam has a large ICT sector including more than 35 datacenters. The sector is both economically important and one of the larger users of energy in the region. This sector alone is responsible for about 10% of all electricity usage in the region, about 350 million KWh, has been estimated in 2010. The city wants to decrease energy use of datacenters, while maintaining ICT's role in stimulating the economy.

The City of Amsterdam started the process of regulating the optimized energy efficiency of datacenters. The organization Green IT Amsterdam Region set out to create a support package to enable datacenters to comply with the new regulations and improve their energy efficiency. A fundamental part of this package is the online platform Green IT Energy Solutions, www.greenites.nl. This platform is a showcase and sharing tool for suppliers of energy efficiency solutions for datacenters. On this website key categories for datacenters are identified and categorised. The categories include cooling, renewable energy, labelling and advice, servers, UPS, energy supply and lighting. In each category datacenter owners and operators have an overview of proven solutions to improve the energy efficiency of their datacenters.



The practice consists of three parts:

- To collect, document and showcase instruments for greening Amsterdam datacenters
- Move from regional impact to national impact
- Boost commercialization of the solutions/instruments identified



Owner: Green IT Amsterdam Region, www.greenitamsterdam.nl

Start date: May 2012

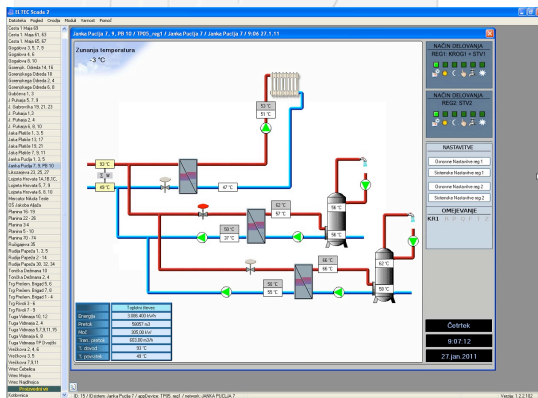
End date: February 2013 platform launched

Link: www.greenites.nl

GreenITNet Good Practice: Kranj Reduction of heat losses in Gorenjska Region

This good practice is about complete reconstruction of the remote heating system in urban area with apartment blocks in Kranj. The reconstruction was necessary to reduce energy for heating and to reduce costs of operation. It involves reconstruction of heating stations with introduction of remote control and management system.

Reconstruction involves replacement of 14 heating stations with new ones, which consist of newest technology and regulation equipment, and replacement of ineffective regulation equipment with new one on other 52 stations. Special attention was dedicated to reconstruction of heating stations for preparation of sanitary hot water.



Remote control and management system allows that manager completely controls and monitors functioning of remote heating system. By this we can achieve lower temperatures of the medium on primary basis and consequently lower heat losses on the grid. By that the water coming back to boiler room has lower temperatures and provides function of gas engines.

Visual depictions example of thermal stations in the system ELTEC SCADA 2

By installing the CHP units (the installation of heat and electricity co-generation units), CO₂ emissions to the environment decreased by 6.800 t/year compared to separate heat and electricity generation, and by additional 600 t/year as a result of renovating heating stations and replacing boilers and other boiler-room equipment.

DOMPLAN d.d. as the boiler-room operator in co-operation with the representatives of the boiler-room co-owners, the civil initiative "Ogrevanje Planina", carried out a complete reconstruction of the boiler-room and heated water network. The replacement and installation of boilers at a suitable location within the boiler-room resulted in obtaining suitable space for the placement of CHP units owned by SOENERGETIKA d.o.o..

The Municipality of Kranj and Soenergetika d.o.o. concluded an easement agreement granting the rights to construct and operate the infrastructure as well as heat and electricity co-generation units in Planina Kranj, thus establishing conditions to implement the CHP unit construction project. The project envisaged the construction of a CHP unit, actually two separate units (CHP 1 and 2 – hereinafter referred to as "the CHP unit") with the total electric power of around 5,000 kWe.

The complete reconstruction started in March 2011 after a building permit for the installation of the CHP unit had been obtained. The reconstructed boiler part started to operate on september 2011 an operating permit for the CHP unit was obtained in February 2012. In this period two new boilers of 7 MW and 10 MW were installed, 64 heating stations modernised, two CHP units of 3.3MWe and 0.99MWe installed and a modern central control system introduced to supervise the operation of all units in the boiler-room and all heating stations.



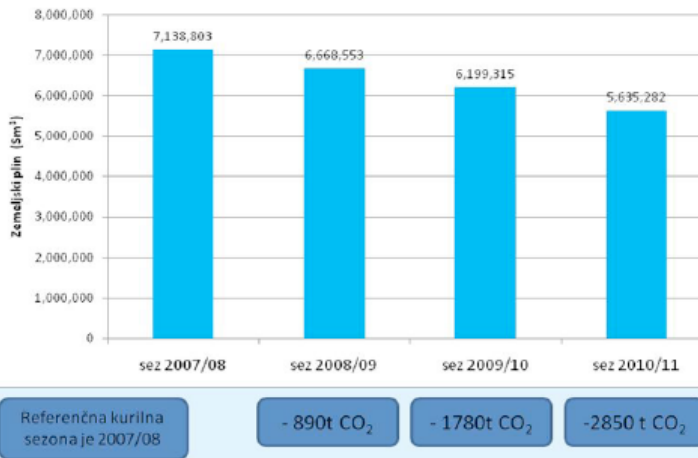
Hot water gas boilers rated at 18.5 MW
17.4 MW and 9.2 MW before replacing



New gas hot water boiler rated at 7 MW
and 10 MW

The result is a reliable system of heating and preparation of hot sanitary water for 4300 residential units in the residential area of Planina Kranj. The investment in the complete reconstruction amounted to EUR 1,5 million, of which EUR 4,2 million was invested in the CHP unit construction.

As a result of this investment, the boiler-room loss was reduced by 5% and the network loss by 4,5 %. The end consumers of heat are also entitled to receive compensation on account of CHP installation, which ultimately means an additional reduction in heating costs in the amount of 201.000 EUR/a.



GreenITNet - Public seminars

The Second Local Seminar on ICT in Riga and a catalogue of good practices is launched

On 28 June, 2013 Riga Energy Agency (REA) is organizing the second seminar on information and communication technologies (ICT) – “*Innovative green information technology solution*”. The event will take place in the Riga City Council from 9.30 am to 2:30 pm. The aim of the seminar is to introduce to the participants the general ICT situation and tasks, as well as the progress made in recent times in the use of ICT in Riga. Information about the seminar can be found also in the Internet at European level, as the event is a part of European Union Sustainable Energy Week.

Currently REA operates in two ICT related international projects - GreenITNet “Green IT Network Europe” and STEP-UP “Strategies towards Energy Performance in Urban Planning”. Working in these projects, inter alia, the knowledge is being acquired on already implemented projects in Riga, where in the field of energy and transport there are successfully integrated innovative information and communication technologies. As a new initiative, which idea will be presented at the seminar, REA develops a catalogue, describing these projects as good practices. It will be freely available in REA website and assumed to be used by other local municipalities to assess the feasibility and usefulness to implement such projects in their areas. A part of the implemented projects descriptions as good practice examples will be translated into English and through Internet networks recommended for implementation in other European cities. The first 7 best practices projects descriptions are included in the agenda of the seminar and the catalogue will be available in REA website after the seminar at once. In the future the catalogue will be constantly updated.



**SUSTAINABLE ENERGY
WEEK 24 - 28 JUNE 2013**

ONE SMALL STEP FROM YOU
ONE GIANT LEAP FOR EUROPE



RIGA Energy Days - Seminar “Innovative Green IT Solutions” **28 June, 2013, Riga City Council Plenary Hall, Ratslaukums 1, Riga**

9.30 – 10.00	Registration of participants
	Moderator – <i>Ms Inete Ielite</i> – Management Board Member, Riga City Sustainable Energy Action Plan
10.00 - 10.10	EUSEW 2013 Opening of Riga Energy Days. <i>Ms Olga Veidina</i> – Member of Board of Directors, ENERGY CITIES, Deputy Chair, Riga City Sustainable Energy Action Plan
10.10 - 10.30	Environment friendly IT solutions for industry development <i>Ms Lilita Sparane</i> – Executive Director, Latvia IT Cluster
10.30 - 10.50	Cluster of Industrial Energy Efficiency and its role in integrating ICT in industries <i>Ms Anda Kursisa</i> – Head, Cluster of Industrial Energy Efficiency
10.50 - 11.10	E-Riga Mr Martins Vids – Chief Data Analyst, Riga Information Technology Centre
11.10 - 11.30	Project „ Promoting Energy Efficiency using smart technologies” <i>Mr Aris Dandens</i> – Head, Smart Grids Competence Centre, „Latvenergo” LTD.
11.30 – 12.00	Coffee break
12.00 – 12.15	Developing a catalogue of good practices for the smart city: (1) Improvement of energy management in multi-apartment buildings <i>Dr.sc.ing. Maija Rubina</i> – Director, Riga Energy Agency
12.15 – 12.30	(2) Energy management in public buildings <i>Mr Janis Sipkova</i> – Chair of the Board, “Energodata” LTD.
12.30 – 12.45	(3) Local biogas cogeneration and use of heat for greenhouses <i>Mr Aigars Peksens</i> –Technical Director, „Getliņi EKO” LTD
12.45-13.00	(4) LED lighting remote management in Riga <i>Mr Janis Drulle</i> – Acting Director, Riga Municipal Agency „Rīgas gaisma”
13.00.-13.15	(5) Heat recovery from unused low-potential heat flows and flue gas <i>Dr.sc.ing. Ugis Osis</i> –Board Member, „Rīgas siltums” LTD
13.15-13.30	(6) Automatic remote heat meters’ reading system in Riga central heating <i>Dr.sc.ing. Ugis Osis</i> –Board Member, „Rīgas siltums” LTD
13.30 -13.45	(7) E-tickets and services for Riga inhabitants <i>Ms Ilona Zaiceva</i> – Project Assistant, „RĪGAS KARTE” LTD
13.45- 14.30	Q&A, discussion

News by the partners

Barcelona

- **Green IT Day, a meeting to promote the use of sustainable and energy efficiency policies in ICT.**

The Casa Llotja de Mar hosted on 21st June, a meeting aimed to promote experience exchange in the use of sustainable ICT. This meeting was organized by the [Barcelona Chamber of Commerce](#) as a member of the European project INTERREG IVC: [Green IT Network](#).



The Green IT Day agenda included a brokerage event in which enterprises such as Agbar, TMB, Pich Aguilera or Schneider Electric presented to the audience their own challenges related to their economic activity. At the same time, the audience had the opportunity to propose their own possible solutions. The meeting focused on green policies in Catalonia. Programs and initiatives at national and international level were presented to support these

policies. One of these initiatives was the Green IT project, in which the Barcelona Chamber of Commerce plays an important role. Its main objective is to reduce the impact of CO2 emissions through the use of the ICT. A workshop on “*Strategies in the use of sustainable ICT in Catalonia*”, was organized during the meeting with representatives of the Network of Science & Technology Parks in Catalonia (XPCAT), the Catalonian Cluster of Energy Efficiency (IDP), LEITAT Technological Center and the company Enertika. Speakers presented good practices on sustainable IT.

Challenges and solutions through networking

The day was closed with the brokerage event "Green IT: seekers and solvers," in which four companies (CETAQUA – AGBAR, Schneider Electric, Pich Aguilera and TMB) presented challenges faced in the implementation of sustainable ICT. The activity also involved SMEs, entrepreneurs and research centers to show ideas to the challenges proposed in order to generate business opportunities.

Green IT and the reduction of CO2 emissions towards 2020

The Green IT project started on 2012 to create a framework of experiences and best practices towards reducing energy consumption and CO2 emissions related to ICT. The project promoted policies to stimulate a green economy ICT and advises companies on how to implement these policies.



News by the partners

Rome

- **Italy institutes the Observatory on Smart Cities and Rome** takes part to this enterprise with the Mayor's press conference, held on 29th May, as the starting point of the city's process of change towards the 2020 European target. Direct consequence of such venture is the further impulse to Greenitnet, which can benefit from the experience and the results of this important initiative.



- **Visit to Málaga's SmartCity**

After a recent stakeholder GreelTNet meeting held in Rome, a delegate of Risorse per Roma SpA was invited to participate to the event in Malaga, Spain, held on 14th June, to present the Smartcity Malaga. That project represents one of the largest European experimentation of smart city project in the framework of European Objective 20-20-20.



Promoted and coordinated by ENDESA, a Spanish society of the ENEL Group, the project involves a consortium of 30 organizations (11 enterprises, 5 Local authorities, 14 universities and Research centers) and a whole neighborhood in Malaga (Playa de la Misericordia) for a 4 years period (the project begun in 2009).