



NEWSLETTER

February
2010

Chairman's Foreword

Dear YES-DC members,

A warm welcome to you all at YES-DC in 2010. This is the first newsletter of 2010 in which we'll be briefly looking backward and forward on YES-DC activities, introduce our new board members and address topics such as wind energy in unusual places and a vacation park as example for future grids.

What a wonderful year it was for YES-DC. When wrapping up 2009, we can state that there was almost one activity each month, and the activities had a wide variety of energy related topics such as SDE (Dutch subsidy system for renewable energy), Desertec and energy in the built environment. There were a few field trips such as our visit to Bonn and the RWE mines and to close the year there was the first recruiting activity combined with our usual network activity. This evening was closed with cheerful Christmas drinks (at the Florin for all old good times).

On top of this; all activities were extraordinary well visited! Contrary to the past few years most activities were now visited by thirty or more YES-DC members and introduces. A great success thanks to you!

Besides these wonderful achievements, I would like to address two milestones

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of the year 2009; the 15th anniversary of YES-DC and the new website. These milestones came together at the 23th of October 2009. In other words, the brand new website was released at the 15th anniversary activity. It was nice that the architects of the former website were present at the 15th anniversary. Although they were a bit disappointed that their website was replaced, they agreed that the new website design fits to YES-DC of these days.

For the year 2010, we just had our first activity, as usual, the 'ALV' which took place at the fourth of February. That evening the new board was installed. I would like to wish the fresh and enthusiastic new team all the best and am convinced they will most certainly make YES-DC flourish in 2010.

All the best for 2010 and for the last time as a chairman: warm regards,

Maarten Mangnus

Colophon

The Newsletter is distributed by YES-DC to their members. Subscription is free of charge and the newsletter can also be downloaded from our website. For any further questions or suggestions feel free to contact us.

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Adventures in the Sand

Author: Erik Holtslag

Warm, sweaty, tired. 14 hours on the move now, communicating the whole day in 4 different languages. The sun has just set and with the help of a few strong lights, the last works of the day are completed.

A 30 year old digger is working on the 4th hole of the evening, and soon the pit will be too deep for the flood lights to reach the bottom. Sand dust is blown over the group of people looking into the pit upon every load of gravel, stones and sand deposited at the side of it. The digger by the way, which already after half an hour of working needed a mechanic to come in and repair it. The repair simply meant bypassing a fuse and praying that the driver wouldn't be executed (not an unthinkable event, as we were to find out a day later).

The task that was laid out before us, was the result of half a year of contractual preparations. In the middle of a large dusty, sun ridden plane, a measurement mast was to be erected. The goal was to measure the wind and other meteorological variables for a period of at least half a year, in order to enable the decision to build a first big wind farm in this part of the world... Quite a small, tidy and simple task one might think, but not so!

With the last dust slowly drifting away in the last bits of wind of the day, the workers, most of whom have just been standing by and looking at the holes being dug, start to move towards the exit of the compound. Past the elements of the mast that have just been offloaded manually from the shipping container that needed 5 weeks to reach this forgotten part of the world from their origination in northern Germany. Past the site office, which was shipped specifically for this purpose into the dessert and which is intended to stay for a full year. Given the fact that it survived the first of its estimated 20 years in these harsh conditions, this extra half a year hopefully wouldn't manage to make it finally fall apart... Although it certainly looked like it would gladly do so!

The group is consisting of German, Polish, Turkish and Azerbaijan construction and climbing specialists from the specialized company, Pakistani workers being hired as a help by the client and of course the client itself, which is of Arab origin. Oh yeah, and me of course, a Dutch meteorologist annex wind engineer. The European part of the group gets back to their car, with a one and a half hour drive ahead back to the hotel. Feeling dirty from the sweat and dust I fall asleep as soon as we reach the main road and the air conditioning is switched on bring the temperature back from a still ridiculously high 35+ to a normal temperature.

Five days later, the full 80 meters was standing. One of the ministers of the country took time to visit the construction works on day number 4, which only made it more exiting and interesting. Quick, a last check of my fumbled cotton jacket swung over my dirty shirt, a quick check on everybody's helmet and the safety procedures and go, from the air conditioned site office into the 45+ temperatures in the middle of the day to welcome him and his staff in their cars on the site. Such a visit indicates that it is a project of national importance and of course we all felt honored!.

Problems with a one day sandstorm, missing parts, an almost fire in the site office (due to a short cut!) and other minor issues did not stop this project from being commissioned. Every day we were treated with local delicacies from very sweet mint tea to camel milk and dates. Now logging of half a year of data could start, and we as a group could look back at a successful project!

The process above, is typically one from my daily life. Similarly challenging but always different processes have been part of my past 2 year agenda in countries like France, Poland, the UK... By ordering, supervising installation and commissioning of measurement equipment for non-standard wind energy projects, I feel that we can make an important contribution to wind energy projects being developed. Specifically in the off-the-beaten track circumstances! There is no university training that will teach you how to do this. There is no manual for how to solve all the challenges you might be confronted with (I don't like the word problems) and sometime when a project is run perfectly you feel a wee bit useless walking over the site with your checklists and camera. But connecting the client and the sub contractor, bridging the language and cultural barriers, finding solutions for technical and logistical challenges and checking compliance with carefully prepared contracts all make supervision necessary and worth while.

All that in the end is needed to get a measurement and subsequent output calculation according to the highest international standards, without which a project will most likely not get financed. Soon this trick will be repeated for projects in the Netherlands, but also as far away as Central and South America and Russia, making wind energy not only a product for the developed nations, but also for developing countries (sorry Russia...). This is only one of the services that we deliver that is needed to get a wind farm up and running... we that's Ecofys!

Introducing our new board members:



Let me introduce myself, I'm Rik Catau, 26 years old, and this year I'll be sending you newsletters and making sure the website gets even better. I first heard of YES-DC during my master study Sustainable Energy Technology in Twente. After getting to know more of YES-DC I knew that joining the board would be a good thing... first of all because you get to eat "boerenkool met rookworst" at board meetings off-course.

Next to being all-into energy (especially solar) and working at KEMA in Arnhem I used to a lot of sports, triathlon to be exact. However, as any sports person knows there are lots of ways to get injuries which also happened to me. So I switched past-times for something that can also get you injured: motorcycling. Now I hear you say, how can you ride a motorcycle when you studied sustainable energy technology. First: It's still more economic than a car! (Ok, not if you put more people in a car but that just a detail.) Secondly: Did you know that 50% of the new board rides a motorcycle? Maybe there's a correlation between working in the field of energy and that. So, I hope to enjoy and inform you writing newsletters and I'll make sure the website gets even better!



My full name is Edgar Hernan Cruz Martinez. I will be teaming up in the organization of events and in the engagement of YES - DC with other international organizations and global climate and energy initiatives and conferences.

I am a Colombian national living in The Netherlands and Associate Consultant at SQ Consult BV. with 8 years of work experience dedicated to energy, climate and sustainability issues. I have participated in the Climate Conferences in Poznan and Copenhagen (COP15), as I am following the adoption of the rules to implement Nationally Appropriate Mitigation Actions and National Adaptation Plans in developing countries. In addition, I am also guest lecturer on Climate policy and programmatic CDM at the University of Twente (The Netherlands). I have been board member of professional associations and has published a number of articles in climate policy and carbon markets

Vakantiepark als leidraad voor de toekomst van stroomnet

Author: Harmen Weijer

In de komende jaren wordt in Nederland steeds meer duurzame stroom ingevoed in het elektriciteitsnetwerk. Hoe reageert dat netwerk als dat een zeer grote hoeveelheid wordt en hoe kan het netwerkbedrijf maar ook gebruikers daar slim op reageren?

Netwerkbedrijf Liander, sinds afgelopen jaar officieel los van de moeder Nuon, heeft dat de afgelopen 4 jaar in een zogeheten micro-grid in Zutphen getest. Feitelijk zijn we het laatste jaar gaan testen, de jaren daarvoor waren voorbereiding en installatie.

Het vakantiepark Bronsberg in Zutphen heeft op 108 van de in totaal 200 vakantiehuizen al acht jaar lang volledig dakvullende zonnepanelen liggen. Indertijd was dat nog een van de projecten die toenmalige manager innovatie Annemarie Goedmakers van Nuon had geïnitieerd. Vier jaar geleden ontstond het idee dit park te gebruiken om een situatie te creëren zoals in een woonwijk in de toekomst met veel zonnepanelen zou kunnen ontstaan. Het park zou los van het middenspanningsnet moeten kunnen draaien.

Met de al aanwezige zonnepanelen werd het vakantiepark Bronsbergen als proefproject een ideale, want betaalbare locatie. "Daarnaast is een dergelijke situatie goed te vergelijken met een buurt in een woonwijk", zegt directeur Peter Molengraaf van Liander. Bovendien zou eventuele overlast van de tests in deze omgeving relatief laag zijn, doordat de meeste huisjes niet permanent bewoond worden.

Accu's

Om te zorgen dat het park los van het netwerk kan draaien was het nodig om de duurzaam opgewekte zonne-energie op te slaan in accu's. Er liggen hier vier zeecontainers met 720 Sunlight-batterijen, die elk 1 kWh kunnen opslaan. Hiermee kan er genoeg opgewekt worden om overdag, 's avonds en 's nachts het park van stroom te voorzien." Lukt dat niet zoals in de winter, dan haalt het park zijn stroom uit het middenspanningsnet.

More Micro Grids

Het project in Bronsbergen maakt deel uit van een Europees programma, More Microgrids. Daarvoor zijn verspreid over Europa zeven projecten geselecteerd, waar in de praktijk wordt onderzocht of en vooral hoe kleine autonome netwerken haalbaar zijn. Liander draagt graag bij aan dit programma, uiteraard ook om zelf belangrijke kennis op te doen op het gebied van zogenaamde 'smart grids'. Die kan bijvoorbeeld leiden tot minder uitvalduur, doordat met intelligent netbeheer storingen kunnen worden verkort of voorkomen. Bovendien helpt die kennis ons bij het omschakelen van een traditionele naar een duurzame energievoorziening.

Highlights:

- Vakantiepark wekt en slaat genoeg stroom op om 12 uur zelfstandig te draaien van het net
- Vier zeecontainers zijn ingericht met 720 1kW-batterijen
- Proef geeft inzicht in het netwerkgedrag bij veel duurzaam opgewekte stroom

Meer informatie over micro grids?

www.energiegids.nl

www.liander.nl

www.bronsbergen.nl

<http://web.eu-egi.eu/>