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## From the editor...



The PEDCA project's activities started in September of 2013. Since then, the project has regularly communicated on its progress through our website and social media such as LinkedIn and Twitter and organised or attended several

workshops and events to spotlight the project. However, since this is our first newsletter, in this edition you can find a summary on PEDCA and we zoom in on one of the regions, The Netherlands, and two of its PEDCA participants. They give some insight on how they see their involvement in PEDCA is linked to what they do as an organisation. We hope you enjoy the read.

*Thanks!  
Esther*

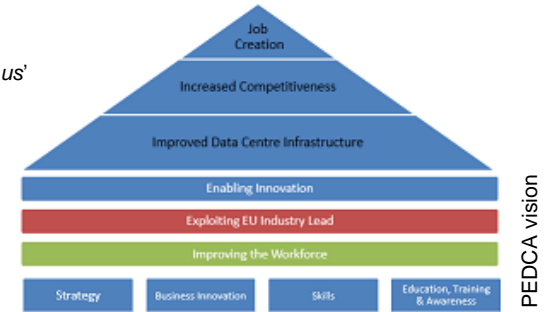
## Introducing PEDCA

PEDCA, the Pan European Data Centre Academy, aims to realize European wide coordinated research and development agendas for the data centre industry. Over a period of 18 months, the PEDCA project is working to prepare for the realization of this Academy, a platform by and with the data centre industry and other parties that have a connection to the subject.

The objectives are to ensure a continuous development and provide guidelines for the development of matching educational programmes, and to improve the standard of practices and skills across Europe. An important aspect of this is seeking the input from and collaborating with as many related parties as possible.

The data centre industry across Amsterdam, London and Frankfurt cooperate on these objectives through local

See 'contact or follow us' on the last page for more info on PEDCA



public-private partnerships, creating clusters that cross traditional sector-boundaries. Simultaneously, they work to stimulate and support the advancement of similar clusters in other regions with a strong or upcoming data centre industry, such as Warsaw. For example by partnering with the local industry for the upcoming [DatacenterDynamics 2014 event](#).

## Amsterdam, from Green Data Port to exporter of energy efficiency expertise

A popular region for data centres to establish themselves even before 2000, Amsterdam started to be recognized as an international internet hotspot in 2001. In that year the municipality of Amsterdam drew up its first establishment policy for data centres with the purpose of supporting Amsterdam as a Green Data Port. The assignment focused on three questions:

- Where can new data centres be located and what (spatial) conditions are important in this?
- How can the data centre sector contribute to the climate and energy goals of the municipality, on a regional and building level?

- What can the Municipality of Amsterdam do to support the Green Data Port?

PEDCA's participant Green IT Amsterdam consortium has been one and perhaps the most visible result that has come out of that policy for data centres and became operational in 2010.

In 2013 the Amsterdam policy has been updated for the first time since 2001, and in 2014 [an English version of the policy document](#) has been made available. Because the data centre industry has seen huge developments, particularly in size and diversity increase, the primary aim was to reflect this new reality. This includes policies related to energy efficiency and sustainability as it has been an integral part of the City's cooperation with the industry. The 'data centre establishment' policy puts the energy transition of the data centre industry at its core. It is providing an energy efficient vision for the sector and works as a stimulator.

Over the past few years, the Dutch industry (for data centres and their 3rd parties), with Amsterdam at its core, has taken huge steps to transform itself into an energy efficient industry. This includes start-ups and mature companies developing solutions which specifically on this topic. Typically this has been a multi-stakeholder collaboration between data centres, industry partners and the public organisations working together. This has gained increasing international attention and recognition, even more so in recent years.

As we are adopting an online lifestyle on an international level, developing data centre markets are looking for the right expertise. Green IT Amsterdam is regularly receiving



requests from regions and cities abroad to share knowledge on this matter. For example, in January of this year we presented on a seminar organised by the Maltese Chamber of Commerce and the embassy of the Netherlands on green IT and energy. We were met with interests from policymakers and developers from within the Maltese government. As we had already prepared [information sheets](#) as part of the ongoing Green IT Network Europe project, we were more than happy to discuss data centre efficiency at Malta's MITA1 data centre.

Green IT Amsterdam has also initiated the ongoing [Green IT Energy Solutions](#) project which aims to decrease the energy efficiency innovation gap between technology suppliers and data centres of all types and sizes. This has already resulted in (for example) many best practice insights and a quick scan for Data Centres that helps identify potential improvement areas. Green IT Amsterdam has been invited by the municipality of Riga to perform this scan in June 2014 on their data centre facility and share expertise on energy efficient data centres with the local industry.

2001 was the beginning of an opportunity, not only to create a local Green Data Port, but to develop solutions and expertise. In 2014 the Amsterdam region has reached the point where we have a strong data centre industry in the region with a vision and identity, and we've entered new opportunities by sharing this knowledge and expertise with other regions.

EU level projects like PEDCA are a great facilitator for this process and at the same time we can contribute to the vision of PEDCA and the industry itself.

## Working towards a sustainable, urban data centre industry

For over a decade Amsterdam has a reputation for been at the heart of ground-breaking initiatives related to energy efficiency and sustainability; and it seems that more exciting years are ahead of us...

interaction. These technologies are to be tested and validated in three operational data centres in urban surroundings. Green IT Amsterdam hopes to bring one of these pilots to the Amsterdam region. On a similar note, ICTRoom and Eaton are joining forces within a European consortium of manufacturers, users and academics (GreenDataNet) to develop novel technologies to reduce the environmental impact of the data explosion.

### About PEDCA participant 'Consortium Green IT Amsterdam'

*The consortium consists of companies in the ICT sector and energy sector, regional authorities, knowledge institutes and related companies and works on continuous improvement of energy efficiency of the data centre industry in the Amsterdam Region, but has since also contributed to initiatives beyond the Amsterdam, and Netherlands, borders. It is a private-public collaboration of about 45 data centres, IT, infrastructure, and energy related organisations. This works as an open innovation platform, a catalyst and hub on energy efficient innovation of data centres. [www.greenitamsterdam.nl](http://www.greenitamsterdam.nl)*

*Working in and with projects as those mentioned in the following articles also aligns very well with the vision being set out by PEDCA with the Data Centre Industry itself on strategy, business innovation, skills and education, training and awareness.*

The objective is to enable urban data centres to reach 80% of renewable power use and decrease their average PUE from 1.6-2.0 to less than 1.3.

One of the main mechanisms to maximize the use of renewable power is exploring large-scale storage solutions that will facilitate the integration of data centres into smart grids. To this end, Nissan, another consortium partner, will investigate the option of reusing for such purposes second-life electric vehicle Li-ion batteries. One of the demonstration sites is expected to run in the Netherlands, showcasing

Following up on its commitment to promote the Green Collar Economy, Green IT Amsterdam is also participating in another EU project, [GEYSER](#) (a consortium of industry experts and knowledge institutes). This project aspires to break the barriers between data centres and smart city actors and stakeholders by enabling the former, to transform itself from passive energy consumer to active (renewable) energy *prosumer*, and understand and facilitate the needs for the latter. GEYSER explores and follows through on innovative approaches on flexible energy demand and supply management (including electricity and heat), load management within networks of data centres and an energy marketplace for smart grid and smart city

the country's pivotal role in environmentally sustainable initiatives within the data centre sector.

### As a takeaway note...

The data centre sector is buzzing with similar initiatives and efforts all in the direction of preparing data centres, the factories of IT industry, for a bright, sustainable future where the Internet of Things and Smart Cities are a reality. Bringing this knowledge and expertise together and ensure continuous improvement, such as PEDCA envisions, will help all parties benefit. As Prof Ian Bitterlin, CTO at Emerson Network Power Systems (EMEA) and

The Green Grid Technical Work Group Chair (EMEA) recently put it <sup>1)</sup>

**“the future is already here – we just have to grasp it”.**

1) <http://www.datacenterdynamics.com/blogs/ian-bitterlin/future-data-centre-already-here-do-we-just-have-reach-out-and-grasp-it>

## Zooming in on participant ‘Cerios Green’

Cerios Green specializes in innovative application for data centres. In particular applications and support for on reduction of energy use and CO2 emissions. In the area of data centres, Cerios Green delivers:



- data centre related research
- data centre certification (DCA)
- help to organize data centre work more effectively
- data centre improvement proposals, decision support with business cases
- solutions to data centres on becoming energy and cost efficient.

Cerios Green acknowledges data centres to become more and more important as the ICT dependency of society grows exponentially. In doing this work in an efficient way, Europe stays in pole position. A sustainable data centre industry is key. Therefore, lots of focus should be kept on the efficient use of energy.

The PEDCA project touches almost every aspect of Cerios Green’s business. The participation of Cerios Green in the Data Centre Alliance allows Cerios Green to become aware of the latest international data centre developments and maintain a

European data centre industry network. Participating in the NEN commission and the EU Code of Conduct meetings, allows Cerios Green to help steer the European data centre industry.

There is little formal structure in the data centre industry and with PEDCA, Cerios Green is able to contribute to the making of a data centre industry platform, where all of the data centre knowledge is gathered and shared. There is a lot of work to be done, also after the PEDCA project has been completed. Europe needs to get its data centre industry developed: develop the data centre platform for knowledge, standards and innovation, and the training and skills for people to work in the data centre industry in order to preserve future data centre work in Europe. And this is fully in line with what Cerios Green wants to help achieve.

## Free Data Center Training workshop by PEDCA

Ever wanted to know if the DC industry is for you? As part of our PEDCA project we are offering another free one-day training seminar for a selected group of students (or recent graduates) who are interested in learning about the rapidly growing European data centre industry. Our previous training session in Delft, The Netherlands was very well received and the turnout was high.



Our second training session will be held in **Frankfurt**, Germany on **May 22 at Goethe University**. It’s an unique opportunity to learn more about one of the world’s fastest growing and rewarding industry sectors. If you think this might be for you or someone you know, don’t hesitate

## By attending, you will receive..

- an introduction to the fast expanding data centre industry
- an introduction to current trends and best practice
- an awareness of a typical data centre and its role within society and the drivers behind it

A Data Centre Alliance **Certificate of attendance** will be provided which will endorse you for interviews or selection. Go directly to the registration page [here](#), or visit our [website](#) first (Event under News & Media).

A recap of our session in Delft will follow shortly.

## Upcoming PEDCA or DC related Events



**15 & 16 May 2014**

**DCA Awards (London / UK)**

<http://dcsawards.com/>



**22 May 2014**

**PEDCA Data Centre Essentials Training (Frankfurt / Germany)**

[http://www.data-central.org/?page=Essentials\\_Training](http://www.data-central.org/?page=Essentials_Training)



**4 June 2014**

**DataCenter Dynamics Event (Warsaw / Poland)**

<http://www.datacenterdynamics.com/conferences/2014/warsaw-2014>



**8 July 2014**

**Data Centre Transformation Conference (London / UK)**

<http://www.dtconference.com/>

## Contact or follow us



[www.pedca.eu](http://www.pedca.eu)



@pedcaproject



Project Pedca

## PEDCA Consortium

- DCA – Data Center Alliance
- Cerios
- London & Partners
- WUSYS
- Green IT Amsterdam
- Goethe University
- University of Leeds
- Frankfurt.de
- TU Delft
- WMC
- Aimes
- SMK Milieukeur

## Colophon

This edition's contributors ...



**Frank Verhagen**  
- Cerios Green



**Vicky Georgiadou**  
- Green IT Amsterdam



**Esther van Bergen**  
- Green IT Amsterdam