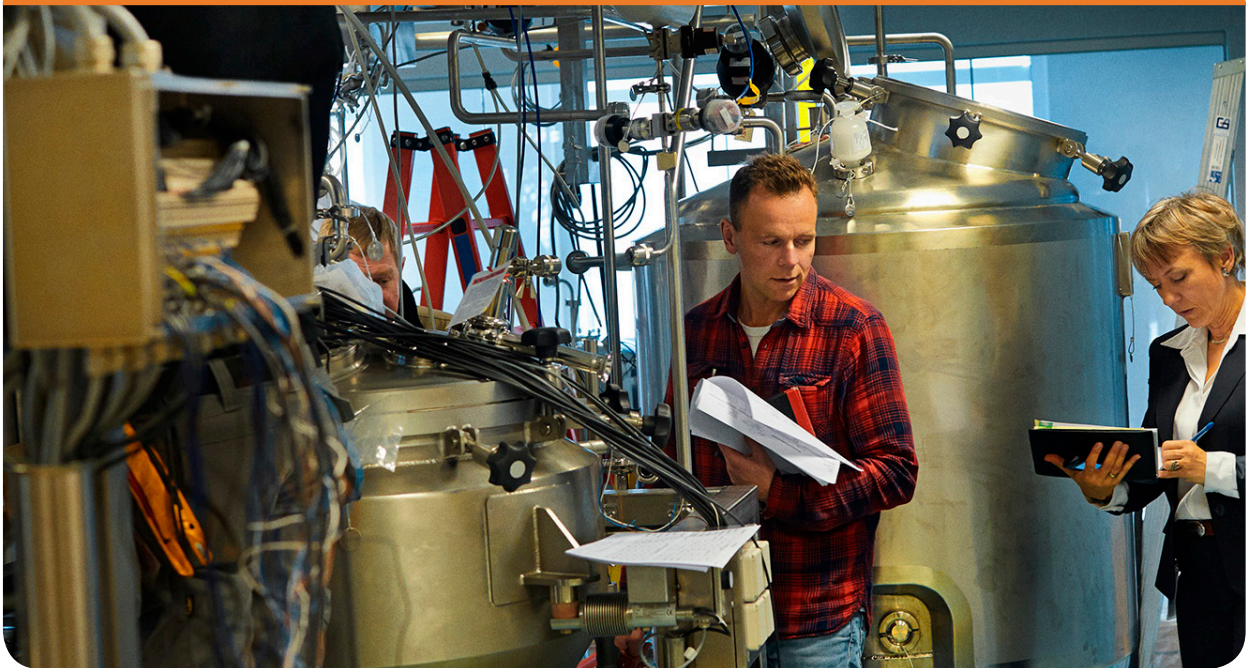




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ISPE Nordic Conference

## **Sustainability in the Pharmaceutical Industry Copenhagen, Denmark**

To be held at AC Hotel Bella Sky Copenhagen  
**Thursday 21 May, 2015**

[www.ispe.org](http://www.ispe.org)

## Sustainability in the Pharmaceutical Industry



Ensuring supply security and license to operate is musts when preparing facilities for the future as are cost reductions. Stakeholder demands for sustainable design, processes and products are ever increasing.

See how other companies have operationalized sustainability. Learn and discuss how Your Company's sustainability strategy can be put into practice. You will get an introduction to the new ISPE Good Practice Guide on Sustainability as well.

### Who should attend?

The conference is relevant for everyone involved in sustainable issues, policymaking, health, safety and environmental work, energy optimization as well as development and maintenance of management systems, etc.

For seminar registration please [click here](#)

If You have any questions regarding the conference or registration, please contact: Henriette Øllgaard, +45 3079 9463, [hhql@nnepharmaplan.com](mailto:hhql@nnepharmaplan.com)

### Sustainability

#### – Good Practice Guide is near completion

GDC review is planned for first quarter 2015. This ISPE Guidance Document is unique; it is written as a reference manual on sustainability and energy efficiency in the pharmaceutical industry; it provides background and guidance on what sustainability is and how facilities may

respond; including design and engineering options, regulatory requirements, and assessment schemes as well as information on current best practices. It is a must have for management looking at international expansion and engineers and designers working on projects.

[Read more here](#)

### ISPE Sustainable Facilities COP Resources

These resources are just one of the many benefits of being a Sustainable Facilities Community of Practice (COP) member. Join the Sustainable Facilities COP and ask questions in the community discussions and gain solutions to real-time challenges. Also, share your experience and expertise by responding to inquiries.

Note that only ISPE Members can engage in these activities. If you are not an ISPE Member, join ISPE and take advantage of all the benefits that membership has to offer.

[Read more here](#)

# Sustainability in the Pharmaceutical Industry



## Agenda

Time	Presentation	Speaker
9.00	Coffee and registration	
9.30	Welcome and setting the scene	Henrik Goldschmidt, Senior Process Specialist, Rambøll
9.45	Sustainability and other trends in the pharmaceutical industry	Gert Mølgaard, Vice President Strategic Development, NNE Pharmaplan (ISPE Nordic Board Member)
10.05	World class Sustainability	Hector Rodriguez, Senior Director of Global EHS & Sustainability at Biogen
10.35	Networking/Coffee Break	
11.05	EHS sound design	Hanna Birna Sigurdardottir, Project Manager, Novo Nordisk
11.45	ISPE's Good Practice Guide on Sustainability	Robert J.E. Bowen, Director Facilities Integration, Global Co-Chair, ISPE HVAC and Sustainable Facilities COP
12.30	Lunch	
13.30	Break-out sessions	In each session presentation(s) is followed by a facilitated workshop
	Water Management and Sustainability	Palle Lindgaard Jørgensen, Business Areas Manager, DHI
	Sustainable materials and resource efficiency	Knud Erik Hilding-Hamann, Director Ideas and Innovation, Danish Technological Institute Lone Stubberup, Director Environment, Health and Safety, Coloplast
	Sustainability in utilities/The new standard	Robert Bowen, Director Facilities Integration
	Sustainability trends and materiality	Peder Michael Pruzan-Jørgensen, BSR
14.15	Plenary debate	Lone Stubberup, Palle Lindgaard Jørgensen, Knud Erik Hilding-Hamann, Robert J.E. Bowen, Peder Michael Pruzan-Jørgensen
14.45	Networking/Coffee Break	
15.15	Sustainable strategies and policymaking	Peder Michael Pruzan-Jørgensen, Managing Director Europe, Business Social Responsibility
15.45	Summing up and suggestions for next steps	Henriette Øllgaard, Principal Consultant, NNE Pharmaplan
16.00	End of program	

## Speakers at the conference



**Henrik Goldschmidt**, Senior Process Specialist, Rambøll Pharma and ISPE Nordic Board Secretary. Educated as Chemistry Engineer (B.Sc.Chem, 1989) and with more than 15 years of experience within pharmaceutical industry – both in production and as consultant – Henrik has a deep insight on processes, GMP and User Requirements in the pharmaceutical industry. Special knowledge on pharmaceutical utility systems like Purified Water (PW) and Water for Injection (WFI), but also Cleaning and Cleaning Validation. Henrik has beside his professional career been working as a volunteer in ISPE Nordic for 10 years and was in 2014 elected as Board Secretary.



**Gert Mølgaard** is Corporate Vice President for Strategic Development in NNE Pharmaplan, an international consulting engineering company specialised in pharma engineering services. He has been working in the pharmaceutical industry for more than 30 years and has broad experiences from many international projects and other assignments over the years.



**Hector Rodriguez** is the Senior Director of Global EHS & Sustainability at Biogen, a company that discovers, develops and delivers innovative therapies for the treatment of neurodegenerative diseases, hemophilia and autoimmune disorders to patients worldwide. In his role Hector has company-wide responsibility for the development, implementation, and management of Sustainability and EHS strategies and programs. Hector is a professor at the University of Massachusetts where he teaches a course on business and sustainability and is a member of the Board of Directors at the American Board of Industrial Hygiene. Hector has advanced degrees in industrial engineering from New Jersey Institute of Technology and an MBA from the Stern School of Business in New York.



**Hanna Birna Sigurdardottir**, Project Manager at Novo Nordisk. 2015: Project Manager for EHS sound design at Novo Nordisk: setting the EHS agenda on how to design large investment projects in an EHS sound way. 2013-2014: Environmental management partner at Novo Nordisk: development and administration of the EHS management system. 2008-2013: EHS consultant at NNE Pharmaplan: Assessments of expected EHS impacts from greenfield and re-building of pharmaceutical facilities, EHS compliance assessments, EHS risk assessments. 2001-2007: Project engineer at NNE Pharmaplan: validation of GMP facilities. 2001: Environmental engineer, M.Sc.



**Rob Bowen** is director of Facilities Integration, a consultancy specialising in masterplanning, concept design and design development. He is a practicing Architect with considerable experience in the design of complex specialist facilities from research and development, CT and API through biopharmaceutical manufacture to oral solid dose, fill/finish and warehousing. Prior to founding Fi he was a principal architect with EPCMV contractors AMEC Projects and Fluor Manufacturing and Life Sciences in the UK.

Rob is a member of the Royal Institute of British Architects and a past Research Fellow of the University of Warwick responsible for the advanced facility design for the UK Technology Strategy Board funded OSD continuous processing study that

achieved the 2012 UK IChemE Projects and Outstanding Achievement Awards. He has written several articles on advanced facility design and the integration of new processes as well as on sustainability for the pharmaceutical industry including leading the ISPE Handbook: Sustainability team.



**Palle Lindgaard-Jørgensen**, Senior Consultant, DHI Water management and sustainability. Palle Lindgaard-Jørgensen holds a PhD in Environmental Microbiology from the University of Copenhagen. He has more than 30 years experience in water management, with focus on industrial pollution control, cleaner technologies, water risk and water efficiency assessments and solutions.



**Knud Erik Hilding-Hamann**, MSc in International marketing, Director, Center for Ideas & Innovation, Danish Technological Institute, Aarhus, Denmark. Knud Erik Hilding-Hamann has worked at the Institute since 1998 and prior to that, 10 years as a business consultant in England, UK. The center employs 30 consultants and conducts more than 300 innovation and technology development assignments per annum in partnership with Danish and foreign companies, public institutions and organisations. Knud Erik is also the project leader of the publicly funded innovation agent program in Denmark, which involves 35 innovation agents across nine advanced technology institutes with the task in 2013-2015 of conducting 450 innovation audits and 280 project initiations in small and medium sized enterprises per annum. Already since 2007, this program first as a pilot and since summer 2010 as a national program has led to more than 2441 innovation audits.



**Lone Stubberup**, Director, Global EHS Development, Coloplast A/S. With more than 20 years of experience in the field of Environment, Health and Safety (EHS) and an educational background as chemical engineer, Lone holds the position as Director for Global EHS Development in Coloplast A/S. She drives through her team the ongoing development of EHS management and performance ensuring that Coloplast is among the sustainable leaders in the medical device industry. To support this her goal is to make "EHS – a part of the decision" throughout the company globally. Throughout her carrier, it has been a passion for Lone to ensure and increase a strategic and systematic EHS approach in the company. Leadership are for her a keyword to success.



**Peder Michael Pruzan-Jørgensen** leads BSR's activities in Europe, the Middle East, and Africa as well as the organization's global Research and Partnership Development teams. A member of BSR's executive team, he also leads BSR's Program Committee, which sets the organization's programmatic priorities. An experienced sustainability executive, Peder Michael works with the world's leading companies in consumer, financial services, transportation, healthcare, and energy sectors on business strategy and operations to help them manage sustainability risks and opportunities. He is a member of several sustainability advisory boards, including the Kingfisher Net-Positive Advisory Board and the Melton Foundation Advisory Board, and he is a member of the UN Women/UNGC Women's Empowerment Principles Leadership Group. Prior to joining BSR, Peder Michael was a key player in growing PricewaterhouseCoopers' sustainable business solutions practice in Copenhagen. He also spent five years with the Danish Foreign Service, where he worked on human rights in international development and foreign policy and served on the United Nation's Commission on the Status of Women. Peder Michael served on the Danish Government's Council on Corporate Responsibility from 2009-2012.

## Presentation synopsis

### Sustainability and other trends in the pharmaceutical industry

**Gert Mølgaard, NNE Pharmaplan**

Many pharmaceutical companies experience a new business reality after the 'patent cliff' and as sustainability issues rise in importance, there is a need to combine the challenges into innovative solutions.

Also there is increasing regulatory awareness that the protection of patients and environment can be combined and thus that ethical, social and environmental issues are all on the agenda of future sustainability.

### World Class Sustainability

**Hector Rodriguez, Biogen**

How to achieve "World class Sustainability" will be elucidated through Biogen's Corporate Level Sustainability tactics and strategies, the why's (value and benefits), the do's and don'ts (supplemented by real life stories, current results) and a look forward (both from a company and industry perspective).

### EHS sound design

**Hanna Birna Sigurdardottir, Project Manager at Novo Nordisk**

EHS (Environment, Health and Safety) sound design in large investment projects: lessons learned and future challenges.

### ISPE Handbook: Sustainability

**Rob Bowen, Facilities Integration**

The ISPE Handbook: Sustainability considers sustainability in the context of our life sciences industry. It is the first handbook rather than Baseline Guide or Good Practice Guide that has been published by ISPE.

As an updatable source book with typical guidance in each of the key topic areas rather than set of a definitive guidance items it has been designed to be improved as new information, methods and technologies present themselves.

There are two key sections: Principles/Policy and Design/Engineering application. The first is about what sustainability is, legislative and regulatory impacts, and guidance on sustainability policy making. The second considers the impact of and provides indicative guidance on sustainable drug process and manufacture from facility location and design to equipment selection and use.

### Water management and sustainability

**Palle Lindgaard-Jørgensen, Senior Consultant, DHI**

The presentation on "Water management and sustainability" will introduce why water is important as an element in sustainability and which elements are to be considered as a part of sustainability assessments of water use. The pharmaceutical industry depends on high quality water during the production of pharmaceutical products as a direct ingredient as well as indirect uses such as rinsing, and formulation.

Systematic water auditing and system analysis can provide a basis for identifying main sustainability concerns related to water – but also help identify ways to improve the sustainability of the water use and discharge of waste water and specific chemicals to the environment. Finally the presentation will give examples on how sustainability has been improved in the pharmaceutical industry through improved water management efforts.

### Sustainable materials and resource efficiency

**Knud Erik Hilding-Hamann, Danish Technological Institute**

In this workshop you will hear two short presentations on opportunities and experiences concerning the introduction of sustainable resources and materials in the pharmaceutical sector. Increasingly, manufacturers must balance the critical regulations for patient safety and health with more and more stringent environmental concerns and consumer interests. Steps are being taken toward more environmentally friendly raw materials, supply chains, production and logistics, as well as packaging solutions in the industry, but more will and can be done in the future. As a participant in this workshop you will hear about and share the latest experiences around sustainable materials and resource efficiency in the pharmaceutical industry.

### When CO<sub>2</sub> reduction and cost optimization goes hand in hand

**Lone Stubberup, Coloplast**

At the same time as Coloplast has increased production by eight percent a year, they have managed to cut off seven percent of the total CO<sub>2</sub> emissions, which correspond to 26% per produced unit. This is the result of a very holistic and focused environmental effort where CO<sub>2</sub> reductions and improved cost goes hand in hand. Learn how Coloplast decided on an ambitious target to reduce absolute emissions despite the expectations of high growth and translated the target into concrete activities at local sites including a follow up process. The result was more than 150 efficiency improvement projects, spread out over production sites in Denmark, Hungary and China altogether giving the seven percent CO<sub>2</sub> reduction and savings at 12-15 mio DKK/year with a payback period at less than two years.

### Sustainable strategies and policymaking

**Peder Michael Pruzan-Jørgensen, BSR**

At its heart, the pharmaceutical industry serves needs of society by researching, developing and marketing products and services to improve the health and well-being of people. Yet, like any other industry, pharmaceutical companies are expected to fulfil their mission in a sustainable way that also takes into account social and environmental impacts associated with how products are sourced, developed, distributed, and marketed; how operations are managed, animals and people treated; and how executives are paid, the company governed and performance disclosed. Increasingly, policy makers are adopting laws and regulations that set out clear expectations for performance in areas such as supply chain management, sales and marketing, animal testing, disclosure, and bribery and corruption. This session will take a close look at how these trends unfold and what it means to pharma companies.

# Sustainability in the Pharmaceutical Industry

## Registration

Seminar fee	ISPE Member	Non Member
Industry	€ 275	€ 500*)
Regulatory	€ 150	€ 150*)
Academia/Young Professionals	€ 150	€ 375*)
Table Top Exhibition	€ 600**)	€ 600**)

\*) Includes a one year membership in ISPE with all membership benefits – please visit [ispe.org](http://ispe.org)

\*\*) Participation in seminar is not included in table top price, but this is mandatory

Join ISPE by 31 May 2015 and you will get a Double Bonus worth \$685. Your bonus includes a free copy of Good Engineering Practice (pdf version), a \$435 value, and a \$250 conference discount certificate. Get more details or join today using promo code **“BONUSLINK”**

**Event:** Sustainable solutions

**Date:** 21 May 2015, 08:30 – 16:00,  
Registration from 9.00

**Location:** AC Hotel Bella Sky  
Center Boulevard 5  
DK-2300 Copenhagen

**Please register before 16 May 2015 at:**  
<https://ispenordic.nemtilmeld.dk/5>

The number of participants is limited.  
Seats are allocated on a first come, first served principle.

**Questions regarding the event can be raised to:**  
Henriette Øllgaard, [hhql@nnepharmaplan.com](mailto:hhql@nnepharmaplan.com), +45 3079 9463

